City of Redding 2000-2020 General Plan

City of Redding
Development Services Department
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CITY OF REDDING CITY COUNCIL MEMBERS	Robert C. Anderson, Mayor Mark H. Cibula Pat Kight David L. McGeorge Michael Pohlmeyer
FORMER CITY COUNCIL MEMBERS	David A. Kehoe Pat Anderson Ken Murray
CITY OF REDDING PLANNING COMMISSION MEMBERS	Fred Weatherill Mark Woodward Maureen Gaynor Jan Maurer-Watkins Gary Brickwood Tina R. Swanson Randy Memeo
FORMER PLANNING COMMISSION MEMBERS	Dave Rutledge Dallas L. Brown Tom Spade Rick Bosetti Linda Carpenter Paul Edgren
CITY OF REDDING ADMINISTRATION	Michael Warren, City Manager Phillip A. Perry, Assistant City Manager Kurt Starman, Deputy City Manager W. Leonard Wingate, City Attorney Mike Mitchell, Economic Development Director
CITY OF REDDING GENERAL PLAN PROJECT STAFF	Jim Hamilton, Development Services Director Kent Manuel, Project Manager John Keaney, Senior Planner Larry Morgon, Senior Planner Jim King, Senior Planner Phil Carr, Assistant Planner Jim Coats, Geographic Information Systems Manager Kevin Burke, Engineering Technician Diane Morgon, Engineering Technician Doug Will, Traffic Engineer–Planner Judy Huskey, Secretary Stenographer Kelly Salter, Former Deputy City Attorney Jerry H. Swanson, Former Development Services Director

GENERAL PLAN TASK FORCE MEMBERS

Jim Chapin, Chair
Cynthia Gelonek, Vice Chair
Burt Brockett
Keith Brookshaw
Dallas Brown
Ellen Chain
Jim Cook
Bill Cox
Doreeta Domke
Paul Edgren
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Jack Herrin
Bryan Hill
Vi Klaseen
Patsy Knighten
Demetra Kutras
Clay McClain
Mike McLaughlin
Rob Middleton
Charlie Moss
Linda Salter
Lynda Scheben
John Siperek
Howard Stubblefield

FORMER GENERAL PLAN TASK FORCE MEMBERS

Suzanne Blackburn
Bob Dietz
John Dunlap
Gwendolyn Jackson-Sofge

GENERAL PLAN UPDATE CONSULTANT TEAM

J. LAURENCE MINTIER & ASSOCIATES
Project Management/Land Use
Larry Mintier
Bob Lagomarsino
Jim Pepper

CRAWFORD MULTARI & STARR
Economic and Fiscal Analysis/GIS Support
Mike Multari
Paul Crawford

MOORE IACOFANO GOLTSMAN
Community Outreach and Public Participation
Daniel Iacofano
Dave Cottle

EIP ASSOCIATES
Environmental Support
Brian Boxer
Dave Melko

DKS ASSOCIATES
Transportation and Traffic Modeling Support
John Long
Vic Maslanka
John Gibb

BROWN-BUNTIN ASSOCIATES
Noise
Jim Buntin
Jim Brennan

OTHER CONTRIBUTORS AND RESOURCES

PACIFIC MUNICIPAL CONSULTANTS
Laura Webster

Introduction

Introduction

PURPOSE AND NATURE OF THE GENERAL PLAN

PICTURE REDDING'S FUTURE. ENVISION:

- ***A Downtown that has regained its role as the heart of the City.*** It's a pedestrian-friendly area that is different from other parts of the City. The Downtown offers distinct buildings—a mix of historic and contemporary structures—and streets. It is a place where people come to do business, shop, dine, and be entertained.

- ***A community that is attractive to businesses.*** The physical setting of the community, together with good health care, housing, and educational opportunities, makes Redding a City where businesses come and grow; and they are encouraged to do so.

- ***A community that values its unique setting along the Sacramento River.*** Views of the surrounding foothills and mountains are protected, and there is a feeling of openness.

- ***Neighborhoods that are neighborly.*** Streets are pleasant to drive or walk, with sidewalks separated from curbs by landscaped areas. Bike and walking trails link homes to shopping centers, parks, and schools. New homes feature a variety of designs, and parks are plentiful.

- ***Growth that is inward, instead of expanding outward.*** Controlling sprawl allows the City to keep a handle on the costs of roads, police protection, and other public expenses, while continuing to provide a high level of services.

- ***A City that continues to thrive and grow, but still retains its sense of community.***

This is the vision of the City of Redding's General Plan. The Plan is more than a document of intentions, however—it is a guide for growth. The General Plan outlines where the City wants to be and how to get there. It is an action plan for the City.

The General Plan is built upon the premise that growth and development are desirable. It is also built on the premise that growth and development need guidance to maximize benefits and minimize negative impacts.

With input from the community, the General Plan was created to guide land development in the community through the next 20 years. Continuous review and update of the General Plan will be needed, however, to ensure that the Plan is current and consistent with the community's desires. The Plan will need to change as circumstances change or as unexpected opportunities arise.

GUIDING PRINCIPLES

The General Plan reflects the values of the community. These values are the common thread that link the goals, policies, and implementation measures of the Plan. They are:

- Pursue a diverse and stable economy that creates ample employment opportunities.

- Preserve key features of Redding's history, open space, and the City's unique physical setting.

- Accommodate growth while enhancing cultural amenities and Redding's special quality of life.

- Promote quality building that enhances community identity and complements neighborhood character.

- Provide for diverse and affordable housing.

- Conserve the natural environment and protect environmentally sensitive areas.

- Strive to ensure that investment in public services, facilities, and utilities is cost-effective.

- Provide a safe and healthy environment.

Legal Requirements

Under State law, all cities and counties must prepare a general plan. The general plan is a legal document that serves as the "constitution" for a community's land use and development activities. California Government Code Section 65300 requires that the general plan be a comprehensive, long-term document for the physical development of the City. It is intended that the plan be specific rather than vague. The plan may cover any land outside the City's boundaries which, in the judgment of the planning agency, bears relation to the City's planning. This area is typically referred to as the Planning Area. The existing City limits and Redding's 116-square-mile Planning Area are depicted on Figure 1-1 (in the Community Development and Design Element).

There are seven mandatory elements of a general plan. These include:

- *Land Use.* Designates the general distribution and intensity of all uses of land in the community.
- *Circulation.* Identifies the general location and extent of existing and proposed major transportation facilities.
- *Housing.* Assesses current and projected housing needs and presents policies and programs for providing adequate housing for all segments of the community and all economic groups.
- *Conservation.* Addresses the conservation, development, and use of natural resources, including water, forests, soils, rivers, and mineral deposits.
- *Open Space.* Details plans and measures for preserving open space for natural resources, the managed production of resources, outdoor recreation, and public health and safety.
- *Noise.* Identifies and appraises noise problems and includes policies to protect the community from the harmful effects of noise.
- *Safety.* Establishes policies and programs to protect the community from risks associated with seismic, geologic, flood, and fire hazards.

In addition, Government Code Section 65303 authorizes inclusion of other elements in the general plan which, in the judgment of the local legislative body, relate to the physical development of the City. The General Plan of the City of Redding includes four such optional elements: Public Facilities and Services, Recreation, Air Quality, and Economic Development. All elements of the general plan, whether mandatory or optional, have equal legal status.

Maps and Diagrams

The City's General Plan Diagram, which is attached separately at the back of this document, is an integral part of the General Plan. The diagram graphically expresses the Plan's development policies by showing the desired arrangement and location of land uses. The diagram is required to be consistent with the General Plan text under California Government Code Section 65300.5. To be useful to City officials, staff, and the public, the General Plan Diagram must allow the various users of the Plan to reach the same general conclusion about the appropriate use of any property covered by the Plan. Redding decided to prepare a site-specific General Plan Diagram. This diagram designates the type of land use permitted on each property covered by the Plan. The diagram and text together specify the range of dwelling units per net acre of land for each property planned for residences and the building intensity for all other proposed development. This building intensity is expressed in terms of a floor area ratio, which is the gross floor area permitted on a site divided by the total net land area of the lot as defined under **Land Use Intensity Standards**. Other pertinent features of the General Plan Diagram include the location of existing and proposed parks, public schools, and other public services.

General plans also must contain a circulation element. This element shows the location and extent of existing

and proposed thoroughfares, transportation routes, and other local public utilities and facilities and correlates them with the land use element. Maps are needed to show location. Redding's General Plan circulation maps show current and proposed arterials, collector streets, or other roadways as well as bikeways and rail lines. The roadway system has been tested against the planned level of development proposed in this Plan through the year 2020 and has been found to be adequate. There is more discussion of the relationship between land use and circulation in the Circulation Element.

Together, the General Plan Diagram and circulation maps graphically show the managed growth of the City for the next 20 years and beyond. The General Plan contains other maps and diagrams that show various features of Redding and help illustrate the Policies and Implementation Actions of the General Plan.

REGIONAL SETTING

The City of Redding is located in Shasta County in Northern California. It is approximately 100 miles south of the Oregon border and 160 miles north of Sacramento. Redding's population in 1999 was approximately 78,000, which makes Redding the largest City in Shasta County and the largest City in California north of Sacramento. Redding also serves as the county seat of Shasta County.

Redding is situated at the far north end of the Sacramento Valley at the point where the valley meets the foothills of the Cascade mountain range. Redding is surrounded by mountains to the west, north, and east. The most distinctive geographical feature in the area is the Sacramento River, which flows through the City in a general north-south direction. Several creeks also run through the Planning Area from the west and east. These creeks function as tributaries to the Sacramento River. Some have carved gullies and ravines with depths of up to 200 feet, mainly in the western part of the Planning Area.

Redding is bisected by Interstate 5, a major north-south freeway that runs from Canada to Mexico. Interstate 5 connects Redding with major metropolitan areas such as Seattle, Portland, Sacramento, and Los Angeles. State Highways 299, 273, and 44 also pass through Redding, connecting the City with the Pacific Coast and Nevada. The main north-south line of the Union Pacific Railroad runs through the community as well. Redding's location also places it near many outdoor attractions and recreational areas such as Shasta Lake, Lassen Volcanic National Park, and the Shasta/Trinity/Whiskeytown National Recreation Area.

Redding was founded in 1872 and incorporated in 1887 at the northern terminus of the California and Oregon Railroad. The City's early growth was stimulated by the railroad and by the move of the county seat from Shasta in 1884. Mining played a major role in the economic life of Redding around the turn of the century, but it declined as the twentieth century progressed. In 1938, the beginning of construction of Shasta Dam provided another stimulus to growth in Redding. The construction boom after World War II boosted the lumber industry, which became the mainstay of Redding's economy. In more recent years, retail trade, construction, and tourism have become more significant activities as the lumber industry has declined. Redding has become a major regional center for shopping, health care, education, and government. As a result of this, the Redding area has become one of the faster-growing areas in California.

MAJOR ASSUMPTIONS OF THE GENERAL PLAN

The General Plan relies on several assumptions regarding existing and anticipated conditions within Redding's growth area, otherwise known as the Planning Area. They are:

1. Population in the City will approach 113,500 by the year 2020; the Planning area population will grow to approximately 126,000 persons.

2. Outward expansion of the City will be minimized to help maintain efficient and cost-effective services.

3. Minimizing outward expansion, encouraging infill development, and providing incentives for mixed-use projects will have positive impacts on the area's air quality over the long run.

4. The average household population will remain stable at approximately 2.36 persons per household.

5. To accommodate growth, the City may need as many as 14,800 additional housing units by the year 2020.

6. Redding will aggressively protect and enhance its position as the regional hub for the industrial, retail, and service industries.

7. Not all of the items called for in this Plan (e.g., retrofitting streets, community parks development, trail system construction, etc.) will necessarily be completed in the time frame of this Plan. The express intent is to set in motion planning for and construction of these facilities as funds become available.

STRATEGIC ACTIONS OF THE GENERAL PLAN

Of the many actions called for in this Plan, several rise above others with respect to their potential impact on community development. The objectives listed below represent those areas in which the City should focus its main effort through the first five to ten years of the planning period. By focusing on a relatively discreet set of objectives, the citizens of Redding can realize benefits far in excess of what would occur if the resources were spread more thinly. These objectives should be reviewed yearly, progress monitored, and attainment strategies modified as necessary.

1. Continue community/neighborhood planning efforts that will put in place actions geared to the development and redevelopment of key neighborhoods and districts. The initial planning efforts will concentrate on the following areas:

    - Downtown core.
    - Park Marina Drive.
    - Parkview neighborhood.
    - Oasis Road/Interstate 5 growth area.

2. Increase efforts to attract new industry to the area and to retain existing high-paying jobs. Actions will include:

    - Establishing an economic development fund dedicated to furthering economic development efforts and activities.

    - Identifying and pursuing development of at least one large industrial site.

    - Utilizing incentives, where appropriate, to attract/retain business.

3. Contribute to the quality of life of Redding's citizens by investing in cultural, recreational, and open-space projects, including:

    - Constructing a multiple-field sports complex.

    - Supporting the development of Turtle Bay Museums and Arboretum by the River.

    - Providing additional parks, trails, bicycle facilities, and open space throughout the community.

4. Focus development efforts on building neighborhoods, rather than just approving subdivisions. Neighborhoods are created when:

    - Activities and facilities used on a frequent basis, such as stores and parks, function as a unit and are easily accessible to residents.

    - A sense of place is created through such things as uniform tree-planting or utilizing unique signage, lighting, or other features.

    - A park, school, open space, or other public gathering place serves as the focal point of the neighborhood.

5. Ensure that public and private development is:

    - Well-designed.

    - Functional.

    - Complementary to surrounding buildings and lands.

    - Contributes its fair share to providing necessary infrastructure and services that the citizens of Redding have come to expect.

6. Continue to ensure that necessary infrastructure is planned, funded, and constructed so as to maintain the standards expected by the community.

THE PLANNING STRATEGY

Many of the actions called for in this General Plan represent a departure from past planning efforts. This reflects changing needs and expectations, including:

- A new era of "city-building."
- The increasing importance of public/private partnerships.
- The increasing importance of Redding as the regional center for economic activity.

The following section identifies those strategies that will take planning in Redding in new directions to meet the challenges of growth.

Urban Area

The land use policies reinforce community desire to direct growth inward, rather than continue policies geared toward outward expansion. This will allow the City to better contain public-service costs and maintain service levels by taking advantage of existing infrastructure wherever feasible. For instance, focusing growth within the existing urban area will result in fewer miles of roads and utilities to construct and maintain. It will reduce the need for the construction, operation, and maintenance of new fire stations and will keep the service area for police services, solid waste collection, and similar services at a more manageable and efficient size.

The General Plan Diagram reflects this approach by indicating those areas outlying the City where future urbanization would be appropriate subject to annexation to the City; however, policies are included in the Plan that will discourage annexation until additional land is actually needed for development.

It is estimated that there is more than a 20-year supply of land available for urban, single-family development within the City limits of Redding. Single-family land is an excellent barometer of land needs because it is the largest consumer of land, accounting for about 60 percent of all developed land. Further, single-family housing will continue to be the favored housing choice of the real estate market for the foreseeable future. However, it is also important to monitor land absorption on a regular basis to ensure that enough land is available to moderate land costs, hence, housing affordability. This Plan provides flexibility for the future by designating areas for future urban expansion to accommodate future housing needs.

Economic Development

Creating a well-balanced economy is key to realizing the vast potential of the Redding area. With the decline of resource-based jobs over the past two decades, people in Redding now rely more and more on the service, retail, and recreation industries for jobs. Often, wages in the retail services and recreation industries are below the State average, diluting the average wage rate of the area.

In December 1998, the Redding City Council adopted an economic development program for the City. The program contains numerous policies geared toward the attraction, retention, and expansion of businesses. The program includes substantial incentives designed to complement basic policies.

The Economic Development Element contains policies which complement and expand upon the economic development program. The policies cover a wide range of activities, including attracting additional high-paying jobs to the community, recognizing the relationship of retail expansion to municipal revenues, and capitalizing on the benefits of a thriving Downtown.

Retail Commercial Growth

Since the passage of Proposition 13 in 1978, municipalities have come to increasingly rely on revenue from sales taxes to pay for police, fire, planning, and other public services. Redding is no exception. The City has a unique advantage, since it is the regional hub for retail and service activities. However, this advantage does not come without costs. The late 1980s and the 1990s have witnessed strong growth in "big box" retailing, a phenomenon that is not unique to Redding. This retail strategy has changed the basic structure of the physical retail environment, with "super stores" dominating the scene. Redding realizes that it must be prepared for the increasing

challenges that this brings, from a community-development perspective as well as the potential impact on existing businesses.

The commercial land use classifications of this Plan have been developed to provide more certainty about the type and scale of commercial activities that can occur on given sites. For instance, rather than a generic "retail" classification, as contained in Redding's previous General Plan, retail activities are now broken down by type. This strategy provides certainty as to the scale and type of commercial uses that are appropriate at given locations. For instance, the descriptions of the "Neighborhood Commercial" and "Shopping Center" classifications would preclude development of stores that depend on the regional trade area.

Creating Cohesive Neighborhoods

The Plan encourages and promotes the development of new neighborhood types that are not of the homogenous variety that have been constructed over the past 40 years. These new neighborhoods may include a mix of commercial and residential uses designed around a public space and served by transit, thereby helping to reduce dependence on the automobile. Most areas would be within walking distance of the transit stop; pedestrian and bike trails would be prevalent. These neighborhood types, described in the Plan as "Mixed Use Villages," would not be required, but the Plan provides flexibility and incentives to encourage them. Numerous other policies also address designing neighborhoods to make them more livable.

Promoting Well-Designed Public and Private Developments

The design of buildings, streets, and public facilities can have long-lasting impacts on the livability of a community. Good design can:

- Improve the quality of physical changes.
- Protect and increase the value of investment.
- Protect and enhance the existing character of an area.
- Discourage incompatible new construction.

It is clear that design considerations also have limitations. They should not regulate or otherwise restrict growth, nor should they be seen as guaranteeing good design. A community must decide what level, if any, of design influence it wants to make.

This Plan recognizes the importance of basic design principles by focusing predominantly on issues of form and function. For instance, policies: (1) suggest what new major streets should look like; (2) emphasize that taller buildings in certain locations can call attention to and help define an area; (3) encourage the undergrounding of existing overhead electric utilities; (4) provide generous creek and river corridors and ensure appropriate public views and access to these areas; (5) link residential neighborhoods to commercial areas, parks, schools, transit, and other destination points through construction of bike and pedestrian trails; (6) emphasize the importance of appropriate relationships between uses and individual buildings.

Downtown Revitalization

Reclaiming Downtown as the heart and cultural center of Redding is of paramount importance. This Plan, in concert with the Downtown Specific Plan, lays the foundation for the transformation of Downtown through a number of policies geared to enhancing the pedestrian orientation, encouraging residential development, and investing in specific planning. These policies are found in the *Downtown Focus Area* section of the Community Development and Design Element.

Compatibility With the Natural Environment

The open feel of the City that is made possible by the Sacramento River and its tributaries, the open hillsides, and surrounding foothills and mountains plays an extremely important role in how residents and visitors view Redding. This Plan strives to strike a balance between the manmade environment and the importance placed on the natural setting. The Plan calls for a number of measures such as creek-corridor protection, sensitive hillside development, habitat protection, and protection of prominent ridge lines that provide a backdrop to the City.

As a package, new development should accomplish the following:

1. Further the achievement of a more compact urban form.

2. Occur only with availability of essential services.

3. Be compatible with the site's natural topography and setting.

4. Protect limited environmental resources.

5. Enhance the community's image.

6. Preserve existing neighborhood character.

7. Assist in the development of transportation alternatives.

8. Be distinctive, of high quality, and contribute to the positive image of the city.

9. Improve pedestrian convenience and safety.

10. Be reflective of the neighborhood/district in which it is located.

11. Contain aesthetically pleasing streets.

PREPARATION OF THE GENERAL PLAN

The City of Redding adopted its first General Plan in 1958. The most recent General Plan was adopted in 1970, with subsequent updates to several of its elements as well as the General Plan Diagram. Just as trends, values, and technologies change over time, the needs, desires, and priorities of a community evolve. In the early 1990s, the Redding City Council realized that the City was on the threshold of changing from a relatively small community to a mid-sized City of regional importance, thus it needed to be prepared for the challenges that this change would bring. As a result, the General Plan Update process was initiated in September 1995.

To assist in updating the General Plan, the City Council appointed a 30-person citizen General Plan Task Force. The members of this Task Force were selected to represent a broad range of viewpoints and interests within the community. The Task Force was charged to work with City staff, consultants, and the community to provide a vision for Redding's future and to develop a plan for Redding in the next century. Throughout its deliberations, the Task Force emphasized that the General Plan must promote the following objectives:

- Planning for the Downtown and Park Marina Drive areas.
- Neighborhood identity, preservation, and enhancement.
- Economic development.
- Enhancement of community character and identity.
- Development of a broad range of parks, trails, and recreation facilities.
- Habitat protection.
- Transit alternatives.

As the foundation for policy development, a multidisciplinary consulting team, in collaboration with City staff, prepared a *General Plan Background Report* describing existing conditions and trends in Redding. The draft *Background Report* was prepared and issued in May 1996.

The next step in the process was to identify key issues and options for the General Plan to address and summarize them for public review. This was accomplished through the preparation of an *Issues and Alternatives Report*. The report focused on what were considered the most important policy, program, land use, circulation, and development concerns to be addressed in the General Plan. These issues were based largely on findings within the *Background Report* and extensive discussions among consulting team members, City officials, other public agencies, various organizations, developers, and individual citizens. The *Issues and Alternatives Report* was divided into two parts. Part 1 presented a discussion of key land use and related issues facing the City now and into the future. Part 2 provided four land use plan alternatives, each representing a distinct way in which the community could grow. The draft *Issues and Alternatives Report* was issued in May 1997.

The distinct land use alternatives contained within the *Issues and Alternatives* report served to focus Task Force discussion on various growth strategies. These included:

- Concentrating future growth in the Downtown and Hilltop Drive/Dana Drive/Cypress Avenue areas (Central Core Pattern).
- Concentrating future growth along transportation corridors (Mixed Use Corridors Pattern).
- Concentrating future growth in mixed-use "nodes" (Mixed Use Nodes Pattern).
- Reaffirming the existing General Plan's allocation for future growth.

Analyses conducted for these various alternatives indicated that there was no clear distinction between them in terms of vehicular use, air quality, infrastructure costs, etc. In reality, each of these alternatives had shortcomings, particularly from a

market perspective. The Plan that emerged from the Task Force utilized concepts from all alternatives reviewed. Development potential in the Downtown areas was increased significantly and incentives for growth there are to be put into place. Similarly, development intensity in the form of residential densities was increased along several transportation corridors. Lastly, the Plan contains locations and incentives for the development of "Mixed Use Villages" at appropriate locations throughout the City.

Following public review of the *Issues and Alternatives Report*, City staff began to prepare the *General Plan Policy Document*, including goals, policies, and implementation programs for each element. Upon completion of each draft element, the General Plan Task Force thoroughly reviewed and commented on the policy language. The group also participated in a joint workshop with the Planning Commission and City Council to discuss issues of particular concern and/or controversy. The Task Force's recommendations were ultimately forwarded to the Planning Commission, City Council, and members of the public in the form of a *Public Review Draft General Plan*.

Subsequent modifications to the *Public Review Draft General Plan* were made in response to both written and oral comments from the public and the Task Force. The revised document was referred to as the *Public Hearing Draft General Plan*. Opportunities for additional public review and comment were provided following public release of the *Public Hearing Draft General Plan* and accompanying General Plan EIR in May 2000.

California Government Code Section 65351 states that during the preparation of the General Plan, " . . . opportunities for the involvement of citizens . . . and other community groups" be provided "through public hearings and any other means the city . . . deems appropriate." As demonstrated in above paragraphs, the City of Redding has actively sought citizen participation throughout the General Plan update process.

ORGANIZATION OF THE GENERAL PLAN

The *General Plan Policy Document* constitutes the formal policy of the City of Redding for land use, development, and environmental quality. It includes goals, policies, standards, implementation programs, quantified objectives (for housing), the General Plan Diagram, and circulation diagrams.

The *Policy Document* is divided into nine elements:

- Community Development and Design.
- Transportation.
- Natural Resources.
- Health and Safety.
- Noise.
- Public Facilities and Services.
- Recreation.
- Economic Development.
- Housing.
- Air Quality.

Each element is composed of three sections. The first section discusses the purpose and content of the element. The second section cites the authority (State law) by which the element is included in the General Plan. The third section lists the goals and policies of the element.

The Policy Document includes an appendix containing specific actions that the City will take to implement the Plan. The programs in this section also identify the departments or agencies responsible for carrying out each action. In instances where more than one department is listed, the agency named first will assume primary responsibility for completing the program. Timing for completing each program is provided.

The General Plan Diagram depicts the land use patterns for the City for the time frame of the Plan. The diagram must be used in conjunction with the Plan text in order to gain a full understanding of the City's development strategy. The Community Development and Design Element describes each land use classification found on the diagram and specific allowable density and intensity ranges for each land use category.

Goals, Policies, and Implementation Measures

The heart of the General Plan is the set of integrated and internally consistent Goals, Policies, and Implementation Measures in each element. Goals are long-range; they state future conditions—the community's vision of what should be done and where. Policies and implementation measures are short- to intermediate-range. Policies state the City's clear commitment on how these goals will be achieved. Implementation measures carry out the policies and are specific, such as defining land areas to be rezoned or bicycle lanes to be added. Together, policies and implementation measures establish who will carry out the activities needed to meet the goals as well as how and when the goals will be met. They guide day-to-day decision making so there is continuing progress toward the attainment of goals. Some policies and implementation measures need to be reexamined and revised during the life of the Plan. While not changing the basic desirability of the goals, policies, and implementation measures in the long term, they will be carried out when suitable resources are available.

CONSISTENCY OF THE GENERAL PLAN

Internal Consistency

California Government Code Section 65300.5 requires that the "General Plan and elements . . . comprise an integrated, internally consistent and compatible statement of policies." This means that all goals, policies, standards, and implementation programs outlined in one element of the General Plan must agree with those outlined in all other elements. Otherwise, there will be confusion regarding community policies and standards. In addition, all maps and diagrams within the General Plan must be consistent with the text. The General Plan of the City of Redding has been prepared in compliance with these internal consistency requirements.

Consistency With Other Planning Processes

To be an effective guide for future development, the General Plan must provide a framework for local development that is consistent with the policies of relevant State, regional, and local programs and regulatory agencies. This General Plan takes into consideration the following plans or regulations:

- Surface Mining and Reclamation Act.
- Sphere of Influence as regulated by the Local Agency Formation Commission (LAFCO).
- Shasta County Air Quality Attainment Plan.
- Shasta County Hazardous Waste Management Plan.
- Integrated Solid Waste Management Plan.
- Shasta County Regional Transportation Plan.
- Shasta County Congestion Management Plan.
- Comprehensive Land Use Plans for the Redding Municipal Airport and Benton Airpark.
- Redevelopment Plans.

In addition, the General Plan is subject to the requirements of the California Environmental Quality Act (CEQA). A separately bound environmental impact report (EIR) has been prepared in compliance with CEQA requirements to evaluate and disclose the environmental impacts associated with implementation of the General Plan.

IMPLEMENTING THE GENERAL PLAN

As mentioned earlier, the General Plan serves as the "constitution" for land development in a locality. Land use regulations and plans enacted by a local government are the principal means by which the goals and policies of a General Plan are implemented. Therefore, all such regulations and plans must be consistent with the General Plan. These include zoning ordinances, subdivision ordinances, specific and area plans, and redevelopment plans.

Ensuring that existing ordinances and plans are consistent with the General Plan is one method of implementing the General Plan's policies. Other methods include development of new ordinances and plans, financing programs, capital improvement decisions, enforcement actions, and the development review process. These and other methods are incorporated in the implementation program section of each element in the General Plan.

Legally Existing, Nonconforming Land Uses; Approved Development Permits

It should be noted that the General Plan land use designations are applied to vacant properties as well as to built-up areas that have been developed over time under changing regulations with a variety of densities and intensities. It is not the intent of the General Plan to create large numbers of nonconforming uses or structures, but the complexity of the land use pattern in some parts of the City makes it impossible for the General Plan Diagram to accurately reflect every preexisting use, nor is it desirable to reflect them all at the General Plan level. Therefore, zoning regulations should not designate as nonconforming every use or structure that does not fall within the density, intensity, or use standards of the General Plan use category. Conversely, the overall intent of the Land Use Plan is to establish districts which will afford the City an opportunity to more closely identify the appropriate zoning requirements in the future.

Maintenance of the General Plan

During the course of the update of the General Plan, numerous development permits, consistent with the land use classifications of the previous General Plan, were approved by the City. The intent of the City is to honor such approved permits, including building permits, use permits, land divisions, and other ministerial and discretionary permits through their expiration date except as may otherwise be prohibited by law.

State law also defines how cities should maintain their Plan as a contemporary policy guide. Section 65400 (b) of the California Government Code requires that each planning department report annually to the City Council on "the status of the plan and progress in its implementation."

To implement this requirement, the Planning Commission will review the General Plan on an annual basis to monitor its implementation and to ensure consistency with current Federal, State, and local regulations and policies. The status of the General Plan will be presented to the City Council and, at minimum, address the following items:

- A list of approved/denied General Plan amendment requests.
- A summary of capital projects that have been constructed in accordance with the Public Facilities and Services Element.
- Recommendations for resolving any identified inconsistencies with applicable Federal, State, and local regulations or policies.
- A summary of implementation programs completed during the prior year.
- A schedule identifying implementation programs to be completed during the upcoming year.
- A summary of mitigation monitoring actions taken during the prior year.

The Housing Element is the only element which has a mandatory schedule for review and updating. This

time frame has typically been every five years, although modifications to that schedule and/or extensions have been approved in the past by the Legislature. The City will continue to review and update the Housing Element as necessary in accordance with State law.

Although the General Plan should be designed to provide clear guidance for development in the Planning Area, it is also meant to be a flexible planning tool for the community. Community needs and values, environmental conditions, and Federal and State policies can change over time. The General Plan needs to be able to respond to these changes. State law permits up to four amendments per year of a city's general plan. It is also anticipated that the City will undertake a comprehensive review of the General Plan every five to seven years. This allows the community to reassess its situation and revise its goals, policies, and programs accordingly.

Community Development and Design Element

Community Development and Design Element

INTRODUCTION

PURPOSE AND CONTENT

Redding is at the crossroads of evolving from a relatively small community to a midsized city of regional importance. Clearly, decisions the City makes today can dramatically change the way Redding looks, feels, and functions in the future. The policies of the Community Development and Design Element will exert a strong influence on how the City will grow and will significantly impact the quality of life and the City's residents. The General Plan Diagram, together with the policies and implementation programs in this element, will determine the location, intensity, design, and quality of new development as well as the preservation of those natural assets that are key to Redding's identity. Those policies also provide the foundation for policies in other elements of the Plan.

The two principal components of this element are land use and design of our built environment.

Land Use. Land use policies and the General Plan Diagram affect every property in the City. They determine how people can use/develop their land and what they can reasonably expect to develop next door, down the street, or across town. They provide for overall consistency and compatibility between land uses and can be a determining factor on quality of life. The policies and Diagram also have a direct bearing on traffic, the feasibility of public transportation, and the quality of the air. Although the General Plan Diagram is an integral part of this element, because of its size, it has been inserted in a folder at the end of the Policy Document.

Community Design. Achieving a proper balance between the natural environment and the built environment is a key feature of this element. Also key is ensuring that buildings are constructed at a proper scale; that there is a positive relationship between buildings and their surroundings; that the quality of design and materials reflects a uniqueness that is often lacking in public and private buildings; that streets are not only functional, but are pleasant to view and comfortable to walk; and that Downtown is transformed into a pedestrian-friendly, dynamic area. While land use policies establish the balance of land uses in the City, community design policies establish guidelines for the shape and form of the City.

Background data and information for this element are contained in Chapters 1 through 4 of the City of Redding *General Plan Background Report*.

Specific topics addressed within this element include:

- Background for Planning.
- General Plan Land Use Classifications.
- Land Use Intensity Standards.
- General Plan Holding Capacity.
- Area and Specific Plans.
- Land Form.
- Natural Environment.
- Providing Essential Services.
- Annexations.
- Built Environment.
- Promoting Compact Urban Form and Transportation Alternatives.
- Residential Land Use Guidelines.
- Neighborhood Preservation and Enhancement.
- Commercial and Industrial Land Use Guidelines.

- Streets.
- Building Heights.
- Public Art.
- Focus Areas.
- Land Use Administration.

AUTHORITY

California Government Code Section 65302(a) states that a city's general plan shall include:

> "... *a Land Use Element which designates the proposed general distribution, location, and extent of the uses of the land for housing; business; industry; open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty; education; public buildings and grounds; solid and liquid waste-disposal facilities; and other categories of public and private uses of land.*"

The Land Use Element is also required to include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the Plan.

Section 65303 of the California Government Code states that a general plan may include any other optional elements as long as they relate to the physical development of the City. Due to the interrelationship between land use and community design, the City of Redding has chosen to develop a Community Development and Design Element, which includes all the necessary provisions of the Land Use Element as required by the Government Code.

In addition to meeting the mandatory requirements of a land use element, the Community Development and Design Element provides guidance in terms of the community's expectations and desires relative to development design and aesthetics.

BACKGROUND FOR PLANNING

The *General Plan Background Report* contains a detailed summary of information regarding Redding's development over the past twenty years. It sets the stage for many of the planning decisions that must be made if we are to evolve into the community we desire. Specifically, the report addresses such topics as Redding's economy and outlook for the future, the existing mix of land uses, estimates of development potential, population projections, and a myriad of related items.

In addition to statistical analyses, it is also essential that the community is looked at in the context of its constituent parts. It is important to understand how and when growth in the City occurred, to be knowledgeable of market and other determining forces, and to look at past failings and consider them as opportunities to improve the City for all who live in, work in, and visit the community.

This section provides a sense of how Redding has grown over time and what the impacts of that growth have been; and it illustrates some of the practical limitations that cities like Redding face when planning for the future. It also highlights the characteristics of several sectors of Redding, setting the stage for needed policies to address a number of issues.

DEVELOPMENT PATTERN AND LAND USE ORGANIZATION

The original Redding town site was a mere seven-block by seven-block area bounded by North Street (now Eureka Way) and South, East, and West Streets. By 1998, the City had grown to approximately 59 square miles—10 square miles larger than San Francisco. Yet, Redding's 1998 population of 78,000 was about 10 percent of San Francisco's population of 759,000. Few would suggest that Redding emulate San Francisco's development pattern. However, based on persons per square mile (ppsm) of incorporated territory, Redding—at 1,322 ppsm—ranks among the least densely populated metropolitan areas in the North State as illustrated by the following table.

City	Persons per Square Mile
Chico	1,953
Fairfield	2,506
Modesto	5,347
Woodland	4,137
Redding	**1,322**
Santa Rosa	3,385
Sacramento	3,930

While in part the result of topography, flood-prone lands, and physical barriers (such as the Sacramento River, Interstate 5, and the Union Pacific Railroad), the relatively low-density, discontinuous nature of Redding's development pattern does not come without its costs. These include increased costs of providing public services; loss of community identity, or "sense of place"; decreased air quality due to a near total reliance on the automobile; and a neglect of older, established residential neighborhoods and commercial areas in preference for development in new areas.

Few cities have the luxury of sole control over all land uses contained within them. Redding is no exception. Redding has grown geographically through the annexation of lands which were formerly outside its jurisdictional control. In fact, some of the larger annexations (e.g., Enterprise and Cascade areas) added not only significant territory to the City, but increased its population base and level of development as well. In part, this helps to explain why there seems to be no organizing principle underlying Redding's urban structure. It also serves to explain the lack of consistency in infrastructure improvements, landscape, and building design as well as lack of public-street access to individual properties found in various parts of the City.

OPPORTUNITIES TO INFLUENCE DEVELOPMENT PATTERNS

This General Plan contains a number of policies that will serve to direct growth, with a priority on those areas where infrastructure and urban services can be economically provided in the short run. Those policies are reflected on the *General Plan Diagram*—the exhibit which depicts how each property in the Planning Area may be used, whether for commercial, industrial, residential, or other uses. The policies include focusing growth within the current City limits;

providing incentives for higher-density, mixed-use projects, both Downtown and other key locations; encouraging infill development; controlling strip commercial development; concentrating the growth of regional-type shopping facilities (i.e., large discount/"big box" retailers) in a relatively few locations; and providing neighborhood shopping near residences. However, the Plan also acknowledges that additional land will eventually be necessary to accommodate the City's growing population. Policies call for future expansion of the urban area to the east (Stillwater Creek basin) and northwest (Quartz Hill Road area).

COMMUNITY CHARACTERISTICS

Redding's Planning Area can be divided into five primary sectors, each of which is shaped by its unique characteristics, histories, and issues. These areas are (1) Central and West Redding, (2) East Redding (Enterprise), (3) Dana Drive and Northeast Redding, (4) North Redding, and (5) South Redding.

Central and West Redding

Central Redding is the location of the City's original commercial and office core. Local government facilities and most of its older residential districts are also located here. Spreading outward from the original town site astride the railroad in a grid pattern typical of the time, Redding grew north and east to the edge of the bluff that borders the Sacramento River, south along the highway and railroad spine, and west into the hills and gullies. Extension of the early street pattern across the ravines created unusable lots and "paper" streets that remain undeveloped today.

Some of the City's most unique and historic residential areas are located west of Central Redding in the Magnolia neighborhood and its adjacent neighborhoods. Farther west, beyond Benton Airpark and the now closed Benton Sanitary Landfill, lies a large, residential district, consisting exclusively of single-family subdivisions. Development of some of these areas began in the early 1950s, and new developments continue to be constructed today.

West Redding is not only home to some of the City's more popular neighborhoods, but also home to Mercy Hospital and numerous doctors' office complexes and professional offices. Until such time as Downtown redevelopment occurs or additional multiple-family sites are identified, Central and West Redding will have a significant imbalance in available housing opportunities.

With the construction of Interstate 5, most new commercial investment was directed to locations other than Central Redding. The expansion of County government offices, Redding Medical Center, and Mercy Hospital also promoted office construction along Court, Oregon, and West Streets, displacing older residential uses.

Downtown Redding remains an important area, even though it was bypassed by the construction of Interstate 5, encouraging most new retail development to locate east of the river. All other major traffic arteries converge Downtown, which contributes to its viability. Recent efforts, including redevelopment projects to improve the appearance and pedestrian orientation of Downtown streets, demonstrate the community's commitment to maintaining and enhancing the unique character of the heart of the community. The development of the Turtle Bay Museums and Arboretum by the River and the new Civic Center will serve to emphasize the importance of the City's core area.

East Redding (Enterprise)

Development in the Enterprise area occurred almost entirely in the postwar years. Early subdivisions were located along Old Highway 44 (now known as Cypress Avenue), Churn Creek Road, and Hartnell Avenue. Subsequent development has taken place both to the north up to the new State Highway 44 and to the south into the Churn Creek Bottom area. The street pattern in some older residential areas is poor, with long, dead-end streets and offset intersections. A lack of adequate subdivision regulations in the early days of development permitted the creation of large, deep lots surrounded by smaller lots and hundreds of landlocked parcels that can be reached only by private roads or by access drives across other properties. This lot pattern makes further development very inefficient and difficult and necessitates providing new, costly streets and infrastructure.

Like the residential areas, commercial development in the Enterprise area originally occurred in a haphazard manner along Old State Highway 44, Bechelli Lane,

Hartnell Avenue, and at freeway interchanges. Access to many stores in these locations is poor, and the nature of this strip-type development—with each establishment having its own parking lot and driveway—precludes parking once and visiting several businesses. The construction of Interstate 5 had a noticeable impact on commercial growth at the north end of this area along Hilltop Drive and other easily accessible locations. Service stations, motels, restaurants, and other uses that seek readily visible sites and easy freeway access can be found in this area. This area continues to develop with commercial uses, which can now be found along Churn Creek Road as well. Two overpasses across State Highway 44 connect this area to the newly expanding Dana Drive regional commercial hub and to an expanding residential area to the northeast.

Dana Drive and Northeast Redding

Following the construction of Interstate 5, a noticeable pattern of commercial development, together with additional suburban residential growth, has occurred north of State Highway 44 along Dana Drive. Additional growth has also occurred along the northern extension of Churn Creek Road and eastward along Old Alturas Road. Commercial development largely commenced with the Mount Shasta Mall, which is located at the northeast corner of Hilltop Drive and Dana Drive. Subsequent regional commercial development has since spread eastward to Victor Avenue. In conjunction with commercial activities, residential development flourished to the north on Churn Creek Road and to the east on Old Alturas Road. The Dana Drive Benefit District and the Churn Creek Road Overcrossing Assessment District were formed in order to provide infrastructure for this newly established regional commercial hub.

All signs indicate that the available vacant commercial land in this area will be built out by the year 2005. Plans to expand the Mount Shasta Mall have been explored, and it is likely that these plans will commence before the year 2000. Large regional commercial store developers are still exploring options within the Dana Drive area. Multiple-family and single-family development continues to expand immediately north and east of the commercial development. Vehicle traffic in this area has increased significantly, which has necessitated the upgrade and improvement of the streets and intersections.

North Redding

Like Enterprise, the North Redding area, extending from Keswick Dam to Shasta College, includes a scattering of residential and commercial development. Along North Market Street, formerly Highway 99, Redding's "Miracle Mile" is lined with a variety of motel, restaurant, retail, and auto sales establishments. Adjoining lowlands to the west have been developed with residential subdivisions and affordable housing units. Lake Redding-Caldwell Park extends along the north bank of the river on each side of the railroad trestle. This major recreation area has picnicking, playground, swimming, and other facilities.

Lake Boulevard is the main artery of the Buckeye area, a major portion of which was annexed to the City of Redding in 1969. Strip commercial development is strung along Lake Boulevard, and there is scattered residential development in the area. Landlocked parcels are common, with heavy dependence on private roads for access. Mobile homes are a major residential type here, both in mobile home parks and on individual lots. The pattern of small ownerships and prevalence of mobile homes in some areas may tend to discourage subdivision activity, particularly on the northern fringe of the Planning Area along Oasis Road.

South Redding

Much of the development of South Redding came after World War II when subdivision activity expanded into the lower elevations and along the Anderson-Cottonwood Irrigation District Canal (ACID). Scattered developments also sprang up in the Live Oak-Bonnyview (Cascade) area to the south and along ridge tops in the southwestern part of the Planning Area. Also to the south, the old principal traffic artery—Old Highway 99 (now known as Highway 273)—became a commercial strip lined with an assortment of motels, truck stops, and service stations; industrial and distribution establishments; and local retail services. As a commercial gateway to the City, this area has largely become obsolete in design and function.

Several recent residential developments have occurred in the area, including the Country Heights Subdivision along the western ridges, as well as new developments in the Creekside, Hemlock, and East Bonnyview Road

areas. The latter developments have led to a reduction in the pastoral setting that was recently prevalent in the area.

OPPORTUNITIES TO IMPROVE THE COMMUNITY'S APPEARANCE

One of Redding's greatest assets and defining features is the Sacramento River. Lake Redding-Caldwell Park demonstrates what can be done with the riverbank where flat land is available. But not all of the bank need be landscaped. Much of the wooded shoreline should be retained in its natural state for enjoyment within the area and viewing from other locations. The glistening water, sheer cliffs, tree-lined banks, and the network of creeks and gullies leading from the river are all important scenic assets as well as potential recreational areas. Wherever possible, views of the river should be protected and enhanced. Development of prominent sites with attractive, well-designed buildings should be encouraged, and public access should be preserved.

The approach to Redding from the east (State Route 44) offers a fine view of the City, with Mercy Hospital and Redding Medical Center standing out as landmarks. This entrance should be improved and enhanced to create an attractive gateway. The foothills beyond the City should be preserved to maintain an open, largely undeveloped backdrop.

Cypress Avenue provides the freeway traveler with services and also gives visitors and residents another entrance into Central Redding. Here, stately trees should replace overhead utility lines, and median landscaping should be provided. Plantings are needed to reduce the expanse and bleakness of large parking lots.

North Market Street, Redding's former front door to the north, provides a striking entrance as the motorist crests the hill at Lake Boulevard and begins the descent to the river. But the so-called "Miracle Mile" fails to carry through the invitation to Redding. Excessive signage and limited landscape detract from the corridor. More trees and landscaping of the broad roadway are needed, along with more restrained signage that identifies each use without blocking out the next. North Market Street should have the aspect of a parkway, leading to the Sacramento River Bridge with its view of Shasta Bally and Lake Redding, Caldwell Park, and the bluffs that mark the edge of the Downtown. Emphasis should be placed on providing high-quality visitor services such as restaurants, motels, and similar services.

South Market Street is an extended strip of motels mingled with commercial services and industrial uses and continues to be an important artery for local traffic entering Redding. North of the railroad underpass, the existing street section makes it difficult to provide a tree-lined median strip, but small traffic islands and appropriate areas along each side of the street could be enhanced with groups of trees that would not interfere with traffic movements. More restrained signage and a general upgrading of the appearance of commercial establishments lining the street would improve the appearance of the corridor considerably. Additional plantings along each side of the corridor, including clusters of trees supplemented with bands of low-maintenance shrubbery, could also do much to improve the appearance and create visual interest.

Eureka Way, entering Redding through the western foothills, is another important gateway to the community. Apartment and office development, compatible with the terrain and nearby high-quality residential areas, has precluded to some extent the commercial strip that might have otherwise arisen. Continued careful zoning regulations and design guidelines are needed to ensure a high standard of development.

Several retail centers throughout the community, which were constructed prior to current landscape standards and proposed design guidelines, contain vast areas of uninterrupted asphalt and building facades that lack any unique architectural features. Comprehensive remodeling of these facilities should be encouraged to address not only building facade upgrades, but overall landscape and signage. The impact of such remodeling projects would be more than visual. These kinds of improvements could bring new life to older commercial areas and help them to compete more effectively with newer commercial developments.

Downtown is characterized primarily by older one- and two-story structures, many with remodeled fronts and a variety of projecting canopies and signs. Some undergrounding of utility lines has been completed over the years. This program should be continued and

expanded to other parts of the City as well. Recent efforts of the Downtown Task Force and Redding Redevelopment Agency have led to the construction of a variety of improvements designed to enhance the overall streetscape. These include decorative pavement treatments, contemporary streetlights, landscape, and pedestrian-oriented features. Continuation of these improvements should be extended along all primary arterials within the Downtown to clearly distinguish it from other parts of the community.

Redding's residential areas have grown at a moderate pace over the years with relatively few large-scale, look-alike subdivisions. Development has taken place in all directions outward from Downtown. Some have an urban look with fully paved streets, including curbs, gutters, and sidewalks. Others have semirural settings with few city-type improvements. Variety and quality should be encouraged in all site planning and building design to set a new standard of community pride of the built environment.

THE LAND USE PLAN

GENERAL PLAN LAND USE CLASSIFICATIONS

The following describes the land use classifications used in this General Plan. The classifications shown on the General Plan Diagram designate the types of uses that are allowed within each area of the City. The classifications fall within eight major land use categories: Residential, Commercial, Industrial, Public and Institutional, Airport Service, Parks, Greenway (Open Space), and Critical Mineral Resource Overlay.

Residential densities and commercial (e.g., nonresidential) intensity are computed using gross developable acreage. For purposes of this General Plan, gross developable acreage refers to that land remaining for development (including roadways) after environmental constraints (floodplains and slopes exceeding 20 percent) have been deducted from gross acreage. Required resource buffer areas as discussed in this General Plan, while not available for development, may be included as developable acreage for the purpose of calculating project density.

Each of the classifications listed below is accompanied by a general description and context for the use of the classification. The classifications are implemented by the City's Zoning Code.

RESIDENTIAL

The General Plan Diagram of the General Plan includes eight residential categories which provide for a full range of housing types for the City.

Each residential category includes a density range (minimum and maximum densities). While the City assumes that variations in density and private market conditions will determine the types of housing produced, the City will utilize the policies of the various elements of this Plan to evaluate development proposals for appropriate densities within the given ranges.

Uses that are typically located in residential areas, such as churches, schools, parks, residential care facilities, and child-care facilities, are not specifically addressed within the residential definitions. Further, uses such as offices, clinics, and similar uses may be established in certain multiple-family areas as determined appropriate by implementing zoning.

Residential — 1 Dwelling Unit per 5 Acres and Larger (5 a/u)

This category is characterized by very large rural lots, a minimum of five acres in size. It is appropriate in areas which have historically been utilized for agricultural purposes and those areas which are constrained by relatively extreme topography or are in outlying rural areas.

Residential — 1 Dwelling Unit per 1 to 5 Acres (1 to 5 a/c)

This category is characterized by large rural lots, generally greater than one acre in size. This category is applied to hillside areas and to transition areas between agricultural or other rural uses and urban uses. Clustered development with smaller lots is encouraged provided that the project density does not exceed that allowed for the property, and clustering provides consolidated open-space areas in excess of that which would otherwise be achieved.

Residential — 1 to 2 Dwelling Units per Acre (1 to 2 u/a)

This classification accommodates the needs of residents who desire large parcels (20,000 square feet or more) and the feeling of open space integrated with a suburban lifestyle. The range is sufficiently flexible to be used in terrain that would otherwise require extensive grading to develop (10 to 20 percent average slopes). At the upper end of the density range, subdivisions will include fully developed streets and sidewalks and will be served by public sewer and water. At the lower end of the density range, particularly in hillside areas, alternative street designs, street standards, and pedestrian facilities may be appropriate.

Residential — 2 to 3.5 Dwelling Units per Acre (2 to 3.5 u/a)

This range allows for the development of subdivisions which portray a suburban lifestyle, with lots generally

not smaller than 8,000 square feet. A typical development would include larger-than-average- to average-size homes organized around planned open-space areas and parks to provide visual relief and recreational opportunities for residents. The upper end of the density range is generally not appropriate for properties with natural slopes that exceed 8 percent.

Residential — 3.5 to 6 Dwelling Units per Acre (3.5 to 6 u/a)

This classification is intended to accommodate detached or attached single-family homes on a variety of lot sizes (generally not less than 5,000 square feet in area) or the clustering of lots separated by common open spaces to accommodate a range of residential housing types, including duplexes. This density range is generally not appropriate for natural slope areas exceeding 8 percent, except on large projects where slope areas can be avoided or the units otherwise designed to be compatible with natural breaks in the hillside terrain.

Residential — 6 to 10 Dwelling Units per Acre (6 to 10 u/a)

This classification is intended to accommodate single-family detached units, attached single-family patio homes, and/or townhouses. Multiple-family projects and mobile home parks are also appropriate when located near the arterial or collector street system. Clustering is encouraged to provide common open spaces and recreational amenities to the residents. Generally, this designation is not appropriate on lots with slopes exceeding 8 percent, except on large projects where slope areas can be avoided or the units otherwise designed to be compatible with natural breaks in the hillside terrain.

Residential — 10 to 20 Dwelling Units per Acre (10 to 20 u/a)

This classification is intended for multiple-family projects ranging from townhouses to apartments, typically located on arterial or collector street(s). This classification is not appropriate on parcels with slopes exceeding 8 percent, except on large projects where slope areas can be avoided or the units otherwise designed to be compatible with natural breaks in the hillside terrain.

Residential — 20 to 30 Dwelling Units per Acre (20 to 30 u/a)

This classification is intended for multiple-story, multiple-family projects, including condominiums and apartments located within or adjacent to Downtown or along arterial corridors served by public transit.

COMMERCIAL

The following commercial land use classifications accommodate the various segments of the commercial market. These range from small, neighborhood-serving commercial projects to commercial projects that are regional in scale. Office uses are also accommodated in these classifications. Residential uses may be established in conjunction with commercial uses in all commercial classifications as defined below, except in heavy commercial areas; however, residential uses in the two "Office" classifications may be limited to appropriate areas. Except within the "Mixed Use Core," "General Commercial," and "Limited Office" classifications, such residential uses should be subordinate to the commercial use in scale and project impact.

Limited Office (LO)

This classification acts as a transition area within commercial areas or between commercial areas and residential areas. Development is typified by a building or a cluster of buildings built at a residential scale that provides professional office space. Generally, buildings will be single-story; however, with adequate separation from residential uses, two-story buildings may be appropriate. Service businesses that are quiet and compatible with residential uses also may be permitted subject to appropriate performance standards.

General Office (GO)

This classification provides sites for professional and business offices and personal-service businesses with appropriate and compatible accessory uses. This classification may also be used for rest homes; nursing homes; day-care facilities; hospitals; religious, educational, cultural, and public-utility uses; and financial institutions. Ancillary retail uses, such as pharmacies, are appropriate as are "sit-down" restaurants.

Neighborhood Commercial (NC)

This designation provides for convenience and neighborhood shopping areas which provide a range of day-to-day retail goods and services. Neighborhood-commercial uses can range from free-standing "mom and pop" stores and service establishments to a cluster of uses on parcels of several acres. Auto-oriented uses, other than service stations/minimarkets, are not allowed.

Shopping Center (SC)

This classification provides sites for shopping centers serving a larger market area than a neighborhood center, but a smaller market than a regional center. A typical center includes two or more anchor tenants, such as a supermarket and combined drug/variety/garden business; tenants offering consumer goods and personal services; and office and clinic uses. Sites generally will range from 5 to 20 acres and accommodate 50,000 to 200,000 square feet of building area. Scale of development, including individual buildings, will be at a smaller scale than that found in developments servicing a regional market.

Regional Commercial (RC)

This classification accommodates a mix of retail uses and associated services on a regional scale, including malls with several full-line department stores as anchor tenants. Power centers and free-standing retail, office, and service establishments are also appropriate. Individual buildings may range from 100,000 to 200,000 square feet of floor area; enclosed malls could range from 500,000 to over 1 million square feet in floor area.

General Commercial (GC)

This classification is intended for existing commercial strips on arterial streets and interchange areas where commercial concentration are desirable. Allowable uses include retail stores, offices, and personal-service establishments. Financial institutions, private schools, day-care facilities, convalescent hospitals, automobile sales and service, and similar uses also may be permitted subject to appropriate standards. Scale of development, including individual buildings, will be at a smaller scale than that found in developments servicing a regional market.

Mixed Use Core (MUC)

This classification provides for a full range of uses in the Downtown area, including retail stores; eating and drinking establishments; commercial recreation; entertainment and cultural facilities; financial, business, and personal services; hospitals; hotels and motels; educational and social services; and government offices. Residential uses up to 50 dwelling units per acre also are allowed.

Heavy Commercial (HC)

This classification is intended to provide sites for commercial businesses, particularly those not permitted in other commercial areas because of the large scale of the buildings and frequent truck deliveries which may have adverse impacts on other businesses. These uses may include automobile services, building materials storage and sales, nurseries, equipment sales, wholesaling, storage, and similar uses. Typical retail commercial businesses are also allowed, although this classification is not intended for shopping centers, "power centers," or similar retail development. Residential uses, except as necessary to provide facilities for night watchmen, are not allowed.

INDUSTRIAL

The industrial land use classifications allow different types of warehousing, manufacturing, or processing businesses to be located in appropriate areas by accommodating a variety of manufacturing and employment activities ranging from small, employee-intensive businesses to large, capital-intensive businesses. Ancillary uses and restaurants are appropriate. Residential uses, except as necessary to provide facilities for night watchmen, are not allowed.

General Industry (GI)

This classification allows a wide variety of industrial activities and related uses generally characterized by their limited potential to create significant adverse visual, noise, or other impacts to adjoining public and residential properties. Such uses may include: industrial and business parks, offices, manufacturing, processing, assembling, research, warehousing, small- and large-scale wholesale distribution, heavy equipment sales and repair, screened outdoor storage, and similar and compatible uses. Supporting retail and restaurant uses may be allowed subject to size limits

and siting criteria. Uses characterized by substantial outdoor processing and/or storage are not allowed under this classification (see "Heavy Industry").

Heavy Industry (HI)

This classification allows for the broadest range of industrial uses, including manufacturing, processing, assembling, research, warehousing, small- and large-scale wholesale and distribution, railroad facilities, and similar and compatible uses. Supporting retail and restaurant uses may be allowed subject to size limitations and siting criteria. This classification will also accommodate uses that are characterized by substantial outdoor processing and/or storage including: concrete and asphalt batch plants, automobile dismantling yards, bulk materials and equipment storage, full-line lumber mills/yards, manufacturing of concrete products, and similar uses.

OTHER CLASSIFICATIONS

Airport Service (AS)

This classification includes activities which are typically associated with airports and airport-related uses. This includes a full range of activities such as aircraft sales, service, and storage; charter services; and ancillary visitor services such as food, lodging, and car rentals. The uses may either be publicly or privately operated and must conform with any applicable adopted Airport Land Use Plan and policies.

Public Facilities or Institutional (PF-I; PF-I-S)

This classification is intended for public and quasi-public facilities, including, but not limited to, government services and facilities, fire stations, wastewater treatment facilities, electrical substations, airports, domestic water treatment and storage, landfills, and similar uses. It is also appropriate for institutional uses, such as schools and accredited secondary educational facilities, hospitals, and cemeteries, as well as appropriate lands controlled by philanthropic and nonprofit organizations for existing or future public uses. The General Plan Diagram may not depict public facilities sites that occupy less than two acres.

Parks (improved open space) (PK); Golf Course (public) (PK-G)

This land use classification provides for both public and private open space. The primary land uses include existing and future large neighborhood and regional parks, golf courses, athletic fields, and open-space areas adjacent to improved parks or trails. The General Plan Diagram does not depict existing parks less than two acres in size. Public golf courses designated on the General Plan Diagram of "Park/Golf" may be redeveloped to residential uses consistent with the residential density immediately abutting the property.

Recreation (REC)

As defined in the Redding Riverfront Specific Plan, this classification denotes areas for active water or beach-oriented recreation that utilizes the Kutras Lake as an asset. Use of facilities would be water-oriented, generally open in nature, seasonal in use, and without significant investment in buildings. Uses in this category would maintain public views of and enjoyment of Kutras Lake and Motel Lake.

Greenway (GWY)

"Greenway" is natural open space and includes slopes in excess of 20 percent and the 100-year floodplain of the Sacramento River and its tributary creeks and streams. Natural open space is located predominantly along the Sacramento River, its tributary streams, and the bluffs and creeks of West and East Redding. Because of the inherent dangers to life and property and irrevocable damage to the natural environment, these natural land and water areas should not be urbanized or significantly altered. The specific limits of "Greenway" on any property must be determined by a topographic or flooding analysis particular to that property.

These natural areas are an important local resource and serve as places in which flora or fauna can be maintained in its natural state. In addition, these areas provide relief from urbanization, reduce siltation from excessive grading, buffer various land use activities and transportation routes, are an important visual resource, and can be part of the City's urban trail system.

Mixed Use Neighborhood Overlay

This classification allows for a greater variety of uses and flexibility in site planning than is generally permitted in other classifications. The intent of the "Mixed Use Neighborhood Overlay" is to allow the creation of a mix of land uses in a compact pattern that will reduce dependency on the automobile and basin air quality impacts and promote high-quality, interactive neighborhoods. Mixed-use neighborhoods are characterized by interconnected streets, vertical and/or horizontal mix of commercial and residential uses, and facilities that encourage pedestrian activity and transit accessibility. In order to ensure an appropriate mix of uses within proposed developments, the minimum percentage of a proposed development site that is required for each land use component is shown on Table 1-1.

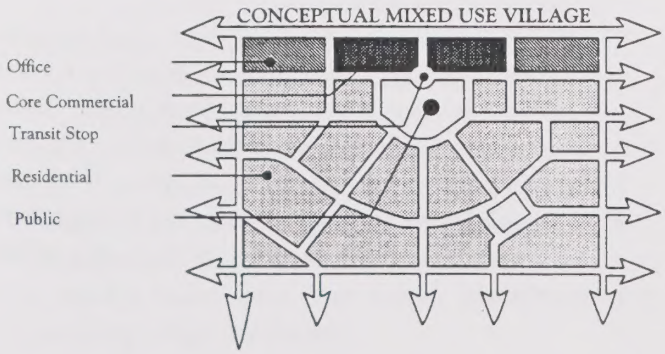
Table 1-1

Proportion of Uses

Use	Minimum	Minimum Average Residential Density
Mixed Use Core	10%[1]	12.0 dwelling units/acre
Residential[2]	50%	8.0 dwelling units/acre
Public	10%	N/A

[1] Up to 100,000 square feet of commercial may be allowed.
[2] Maximum residential density—24.0 dwelling units per acre.

The General Plan Diagram depicts several areas where mixed-use projects are encouraged. These areas include Downtown ("Mixed Use Core") and several areas depicted by the "Mixed Use Neighborhood Overlay" classification. The "Mixed Use Neighborhood Overlay" areas are predominantly undeveloped and have sufficient land area for development of cohesive mixed-use projects. Although not all properties identified within each "Mixed Use Neighborhood Overlay" area must be part of an integrated development, proposed project boundaries must be logical, and it must be demonstrated that the project can functionally relate to adjacent properties consistent with the intent of this district. Mixed-use development is encouraged to develop in areas outside the designated "Mixed Use Neighborhood Overlay" classification as well, provided that the concentration of uses is located near a transit opportunity and is designed to accommodate pedestrian activity and circulation.



Development within the identified "Mixed Use Neighborhood" areas is subject to the following parameters:

These projects result in the development of mixed-use neighborhoods generally between 20 and 160 acres in size that are developed within an average one-quarter mile walking distance of a transit stop. The design, configuration, and mix of uses provide an alternative to traditional suburban development patterns by promoting development of pedestrian-oriented environments and the use of public transportation. This development type—also known as Transit Oriented Development (TOD)—mixes residential, retail, office, open space, and public areas, making it convenient for residents and employees to travel by transit, bicycle, foot, and automobile.

To utilize this overlay district, in developing area, development proposals must be found to be consistent with the intent of the "Mixed Use Neighborhood Overlay" and must be approved under the City's Planned Development District. Development proposals not consistent with this district are limited to the residential densities called for by the underlying land use classification.

The "Mixed Use Neighborhood Overlay" is also appropriate for use in established neighborhoods where a neighborhood plan, area plan, specific plan, or other planning effort has identified locations desirable for establishing a mix of retail, office, and residential uses to serve the neighborhood. In addition to specifying appropriate locations for mixed uses, the planning document should also establish basic design and compatibility standards/guidelines. In these instances, implementation will occur through zoning to an appropriate mixed-use zoning district.

Critical Mineral Resource Overlay

This classification is applied as an "overlay" designation in areas identified by the California Division of Mines and Geology (DMG) as containing mineral resources of demonstrated/measured or inferred significance in locations that the City generally considers suitable for mineral-extraction activities.

In order to ensure the viability of existing and future mineral resource-extraction activities in the overlay areas, new development within and immediately adjacent to lands where a "Critical Mineral Resource Overlay" has been applied will be subject to discretionary approval. Uses generally viewed as incompatible within a "Critical Mineral Resource Overlay" include, but are not limited to: (1) residences in concentrations greater than one unit per 40 acres (applies to new land divisions, not existing legal parcels); (2) critical, sensitive, and high-occupancy facilities as defined in the Health and Safety Element; and (3) industrial or commercial uses which are sensitive to noise, dust, or vibration.

LAND USE INTENSITY STANDARDS

In addition to characterizing the types of allowable land uses, the General Plan must specify standards for population density and building intensity for the various land use classifications adopted by the City. This information not only provides insight as to how many residents, jobs, and housing units will be accommodated by the Plan, but is also useful in planning for infrastructure, traffic, schools, and civic improvements. These building-intensity and population-density standards can be used to calculate "holding capacity" or "buildout."

Holding capacity is normally referred to as the number of people that could theoretically be accommodated in the Planning Area if all land were to develop to the maximum potential allowed by the land use designations of the Plan. Buildout is the *point in time* at which the land in the Planning Area is being used to the maximum extent allowed by the Plan. Buildout of a planning area to its maximum holding capacity will rarely occur given such factors as limitations on capacity of resources, infrastructure, public services necessary to support new development, and the choices by individual property owners about the appropriate extent of development on each parcel. Given conservative population projections, theoretical buildout of the Plan Area under proposed land use classifications would not occur for 40 to 50 years.

Buildout projections, particularly for single-family residential classifications, must be tempered with growth policies of the Plan. It is the intent of this Plan to encourage new development within existing service areas, in this manner avoiding "leap frog" development. However, as the supply of vacant land diminishes over time, new areas should be opened up for development. This will not only serve to provide adequate housing opportunities for a growing population, but will serve to moderate land prices. Based on historic and projected trends, the General Plan Diagram classifies sufficient land within the corporate boundary for suburban density, single-family areas to accommodate the anticipated demand for approximately 20 to 25 years. Additional lands are available outside the corporate limits, but in the Planning Area.

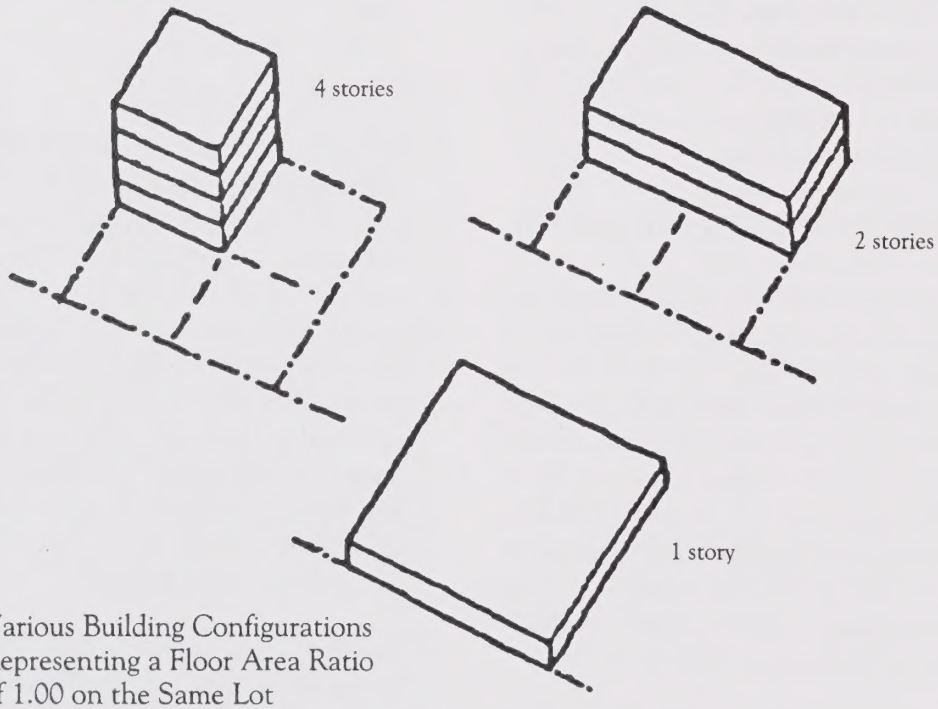
Two types of development estimates are used to determine what the land use map and related policies mean in terms of holding capacity and buildout. Population projections are based on the number of acres of residentially classified property, which is not subject to "Greenway" restrictions as addressed in this Plan. This "net acreage" is multiplied by the assumed *average* density of the ranges provided by each residential land use classification. The acreage for each classification is totaled and then multiplied by the average number of residents per household as determined by the State Department of Finance—2.36 persons per household.

The intensity of nonresidential development must be estimated using a different approach. This Plan acknowledges that allowable intensity is a function of the size (in square-footage terms) of buildings that can be placed on each parcel. This is done by establishing a maximum "floor area ratio" (FAR) for each nonresidential land use classification. A floor area ratio is a ratio of the gross building square footage permitted on a lot to the net square footage of the lot. For example, on a lot with 10,000 square feet of land area, a FAR of .50 would allow 5,000 square feet of floor area to be built regardless of the number of stories in the building (e.g., 2,500 square feet per floor on 2 floors or 5,000 square feet on one floor.) As with

residential uses, not all properties will develop to the maximum allowable floor area ratio. The Plan assumes a "typical" ratio in determining the ultimate extent of development.

Tables 1-2 and 1-3 provide estimates of the number of housing units, population, and square footage of nonresidential development that will be accommodated by this General Plan, based on the designations shown on the General Plan Diagram. Adjustments for existing development have not been made, recognizing that, over time, many areas will redevelop in accordance with this Plan. It should be noted that State highways and the Union Pacific Railroad do not have classifications associated with them.

FLOOR AREA RATIO



Various Building Configurations Representing a Floor Area Ratio of 1.00 on the Same Lot

Table 1-2

General Plan Holding Capacity
Residential Land Uses

Land Use Designations	Assumed Typical Residential Density	Acres	Dwelling Units	Population[1]
RESIDENTIAL (dwelling unit per acre [du/a])				
1 du/5 ac	1 du/5 ac	5,747	1,149	2,713
1 du/1 to 5 ac	1 du/2.5 ac	9,645	3,858	9,105
1–2 du/a	1.5 du/a	3,985	5,978	14,107
2–3.5 du/a	2.75 du/a	12,489	34,345	81,054
3.5–6 du/a	4.75 du/a	2,160	10,260	24,214
6–10 du/a	8 du/a	1,700	13,600	32,096
10–20 du/a	15 du/a	1,021	15,315	36,143
20–30 du/a	25 du/a	33	825	1,947
TOTAL	N/A	36,780	85,330	201,379

[1] Assumes an average of 2.36 persons per dwelling unit.

NOTE: Development of mixed-use projects within the "Mixed Use Overlay" Districts and in the Downtown area would increase the buildout population by approximately 10,000 to 15,000 persons.

Table 1-3

General Plan Holding Capacity
Nonresidential Land Uses

Land Use Designations	Maximum Comml/Indus Floor Area Ratio	Typical Comml/Indus Floor Area Ratio	Acres	Assumed Comml/Indus Square Footage (x1,000)[2]
COMMERCIAL				
Limited Office	.35	.20	143	1,220
General Office	.45	.35	554	8,446
SUBTOTAL			694	9,666
Neighborhood Commercial	.30	.25	75	817
Shopping Center	.30	.25	171	1,862
Regional Commercial	.30	.25	480	5,227
General Commercial	.30	.25	1,208	13,155
Mixed Use Core	2.00	1.00	121	5,271
SUBTOTAL			2,055	26,332
HEAVY COMMERCIAL/INDUSTRY				
Heavy Commercial	.35	.30	1,125	14,701
General Industry[1]	.40[1]	.30	3,331	43,530
Heavy Industry[1]	.50[1]	.40	2,084	36,312
SUBTOTAL			6,540	94,543
OTHER[3]				
Airport Service	.40	.30	1,228	[3]
Pub. Facilities/Institutional	.40	.35	3,127	[3]
Greenway	N/A	N/A	19,843	N/A
Park	N/A	N/A	1,159	N/A
Recreation	N/A	N/A	51	N/A
SUBTOTAL			25,409	
TOTAL			34,697	130,541

[1] Maximum Floor Area Ratio (FAR) of .60 allowed for low employment industries (e.g., warehousing, wholesaling, or distribution).
[2] Based on expected typical floor area ratios.
[3] Uses do not lend themselves to estimation since most properties will not fully develop or will remain undeveloped.

NOTE: Rights-of-way for State highways and the Union Pacific Railroad are not included in acreage calculations.

Future Commercial and Industrial Land Needs

The analysis of existing land use contained in the *General Plan Background Report* is based on 1995 data and provides important information on the quantities of land that are consumed by various types of activities. In summary, that report indicates that retail and office uses, collectively described as "Commercial," occupied approximately 1,395 acres of land, or about 17.9 acres per 1,000 population. Industrial and heavy commercial uses accounted for an additional 1,697 acres, or 21.7 acres per 1,000 population. Assuming that industrial and commercial land needs are to increase in proportion to projected population growth within the City for the year 2020 (113,000 total population), the City will need to provide additional land to accommodate physical growth in these sectors. Under this assumption, the minimum amount of additional land needed in these categories will be:

- Industrial/Heavy Commercial 564 total acres
- Commercial 465 total acres

This Plan recognizes the inherent limitations of data reliability as well the difficulty in predicting trends decades into the future. Further, it is desirable to plan for these types of uses beyond the time frame of this Plan in order to adequately project infrastructure needs and to plan for appropriate adjacent land uses. Therefore, the Plan proposes that lands be classified for these uses in excess of projected 2020 needs. Land consumption will be based predominantly on market forces. It should be noted that the commercial component should provide sufficient retail and office lands to accommodate buildout of the Plan.

As noted in the policies of this element, significantly more industrially classified land is provided than demand would suggest is warranted. This ensures that there is a wide variety of land available to meet currently unknown needs for access, parcel configuration, separation of uses, and similar siting concerns.

SPECIFIC PLANS AND COMPREHENSIVE LAND USE PLANS

In some instances, more refined land use policies are appropriate to reflect the unique nature or development potential of a particular area. Such refinements are described in individual area or specific plans. Prior to preparation of the City's 2000 General Plan Update, 19 area and/or specific plans were adopted for various locations in the City. All the area plans have been superseded by the 2000 General Plan Update. However, because of its unique nature and continued applicability, the Redding Riverfront Specific Plan remains in effect.

The City's Comprehensive Land Use Plans for the Redding Municipal Airport and Benton Airpark were contained within the Redding Municipal Airport Area Plan and the Westside Area Plan, respectively. Since those area plans were superceded by adoption of the 2000 General Plan update, the comprehensive land use plans for those Airports will be reformatted to meet the requirements of State law.

GOALS AND POLICIES

FUTURE URBAN AREA

It is the policy of the City to encourage new urban development within its Sphere of Influence to occur within the City. This will allow new development areas to be served with a full range of community services by the City, will permit necessary economies of scale in service provision to be achieved, and will result in logical service boundaries.

This plan establishes Primary and Secondary Growth Areas. The Primary Growth Area consists of those lands within the corporate boundaries at the time this plan was adopted as well as those contiguous areas and "County islands" that are adjacent to already developed areas.

The Secondary Growth Area encompasses the balance of the lands within the Sphere of Influence that the City has determined are appropriate for future urbanization and annexation to the City. Depending on Redding's land needs over the coming decades, these lands may not be urbanized during the time frame of this plan.

The following policies will influence how the City will grow in a geographic sense in the coming years. Success will take cooperation from the County of Shasta as well as the Local Agency Formation Commission (LAFCO). The intent of these policies is to direct new development into the existing corporate boundaries, while preserving the ability of the City to annex and urbanize additional areas as the demands of growth require.

GOAL **CDD1**

ENCOURAGE URBAN GROWTH TO OCCUR WITHIN THE CITY AND PROVIDE A DEVELOPMENT PATTERN THAT ESTABLISHES AN ORDERLY URBAN SERVICE AREA.

Policies to achieve this goal are to:

CDD1A. Use Figure 1-1 to determine appropriate locations for accommodating urban growth within the City and the Planning Area. The Primary and Secondary Growth Areas depicted on that figure strike a balance between:

- The need for future urban expansion areas.
- The costs associated with annexing areas which contain existing substandard development.
- Rural/urban interface conflicts.
- The ability of the City to provide urban services.

CDD1B. Consider annexation of additional lands under any of the following circumstances:

- The annexation will result in:
  - A more logical service area boundary.
  - The elimination of an existing County "island."
  - More efficient provision of urban services.
  - A resolution of existing health and safety concerns.
  - A neutral or positive fiscal impact to the City.
- Consider modifications of the Primary Growth Area boundary only when the land supply for single-family housing development declines to a ten-year supply or less as determined by the City and/or when appropriate lands for industrial development are identified.

CDD1C. Promote orderly expansion of the City's boundaries through the approval of prezoning prior to annexation. Establish

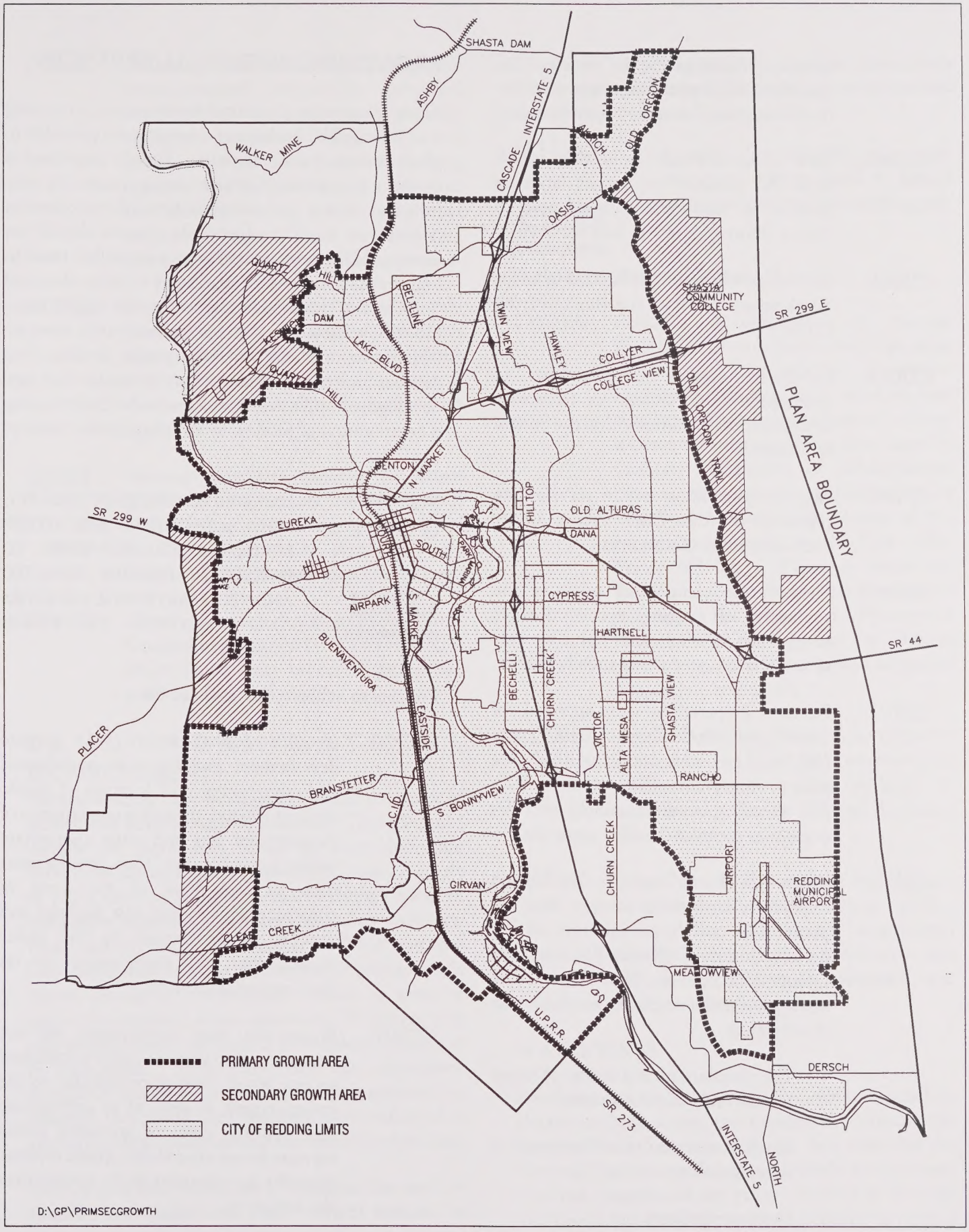


Figure 1-1 Primary and Secondary Growth Areas

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October 3, 2000

specific findings and criteria for consideration of prezoning requests within the Primary and Secondary Growth Areas.

CDD1D. Refer all development applications which have the potential to impact lands or facilities in the unincorporated area to Shasta County for review and comment.

CDD1E. Encourage adjacent jurisdictions to adopt development standards consistent with the City's.

CDD1F. Generally oppose development of community septic systems or temporary sewage disposal facilities within the Sphere of Influence.

CDD1G. Require annexation before services are provided by the City, except under extraordinary circumstances.

CDD1H. Support the creation of new, or the expansion of existing, special districts within the City's Sphere of Influence only where service agreements already exist.

CDD1I. Require preparation and approval of specific plans for the Keswick Dam/Quartz Hill Road area and the Oasis Road area prior to annexation. (See Appendix "A".) The specific plan shall comply with the guidelines contained in that appendix.

CDD1J. Work with Shasta County to develop and implement a planning strategy that will permit the orderly urbanization of key areas within the Stillwater Basin and the Quartz Hill Specific Plan Area. The strategy should include emphasis on determining:

- The distribution and design of future arterial and collector streets.
- Logical extension of utilities such as water and sewer.
- Drainage facilities.
- Residential lot configurations that will accommodate future resubdivision.

PROVIDING ESSENTIAL SERVICES

A key component of rational development is ensuring that basic public facilities and services are provided to all persons in the community. Equally important is ensuring that levels of service remain acceptable over time and are not eroded by additional development as it occurs in the City. Generally, citizens should not have to accept reductions in service levels that result in longer response times for emergency services, electrical "brown-outs," inadequate domestic water supply, overcrowded schools, or other inadequate public services. This section focuses on basic public facilities and services and expresses the intent to ensure that new development will be adequately served without causing a deterioration of service levels in established areas of the City.

GOAL CDD2

ENSURE THE ABILITY OF THE CITY, SCHOOL DISTRICTS, AND OTHER PUBLIC-SERVICE PROVIDERS TO EFFICIENTLY PROVIDE EXPECTED AND NECESSARY PUBLIC FACILITIES AND SERVICES TO THEIR CONSTITUENTS.

Policies to achieve this goal are to:

CDD2A. Require construction of private development projects to be coordinated with the timing and location of public services. Ensure through a combination of development fees and other appropriate funding mechanisms that development pays its fair share of the costs of constructing/providing new facilities and services as determined by the direct impacts that such development has on these essential services.

CDD2B. Ensure that new development will not degrade public services below established service levels, that it contributes to the enhancement of services as appropriate, and that the costs of providing public services do not exceed anticipated revenue from the development of the project over the long term.

CDD2C. Evaluate public-service impacts as part of environmental review for proposed development projects and require applicants to obtain "will-serve" letters from service providers prior to receiving approval of a final subdivision map or, in the absence of the need for a final subdivision map, prior to receiving approval of any required building permits.

CDD2D. Work with school districts in the Planning Area on a continuous basis to determine appropriate sites for new schools; assist Districts by reserving sites as a condition of development approval in accordance with applicable State law.

CDD2E. Maintain adequate capacity for urban growth by continuously monitoring and, when required, increasing the capacity of the City's water, sewer, storm drainage, electric, and solid waste disposal systems.

CDD2F. Classify City-owned property in Southwest Oregon Gulch as "PF/I" to reserve it for a future landfill site or other appropriate public use.

LAND FORM/NATURAL ENVIRONMENT

Natural features have strongly influenced the shape of growth and development in Redding. These features include the Sacramento River, the river bluffs, the floodplains, and the steeper hills and canyons. As early as 1970, the City recognized that Redding's complex topography presented significant issues related to safety, visual quality, and natural resources. That year, the City established a slope development policy which denies density or development credits to areas of property containing slopes exceeding 20 percent and substantially limits the types of allowable development in such areas. From this policy and subsequent floodplain regulations, a strong open-space network has emerged that many City residents have indicated is among Redding's most notable and desirable amenities.

The General Plan continues to recognize the need to consider topography and other natural features in conjunction with development of the community. Issues of safety, visual quality, and natural resources have become even more significant since 1970. Therefore, the Plan seeks to promote community development that respects the existing natural terrain.

GOAL

CDD3

ENSURE A PROPER BALANCE BETWEEN DEVELOPMENT AREAS AND THE NATURAL ENVIRONMENT.

Policies to achieve this goal are to:

CDD3A. Prohibit development in natural floodplains or on hillsides with slope areas exceeding 20 percent. Minor encroachments into these areas for new developments may be authorized without a General Plan amendment if necessary to facilitate installation of infrastructure, provide emergency-access opportunities, or otherwise facilitate construction of the project as approved by the City. (See Policy NR10A.) Where an entire site designated for residential use is subject to flooding or has slopes over 20 percent, a density of 1.0 dwelling unit per 20 acres may be permitted by use permit subject to appropriate standards.

CDD3B. Require buffer areas between development projects and significant watercourses, riparian vegetation, and wetlands in accordance with the Natural Resources Element.

CDD3C. Preserve natural corridors and linkages between habitat types through project design, key open-space acquisitions, floodplain and slope dedications and easements, conservation easements, and similar mechanisms.

WATERWAYS

Residents and visitors alike, have come to depend on the recreational, scenic, environmental, and economic benefits of the Sacramento River. It is vital that the General Plan ensure that the manmade environment does not compromise the values inherent in the river and that future development complements its natural assets. Figure 1-2 shows those areas along the river that are appropriate for passive uses as well as more intense recreational, cultural, and commercial uses.

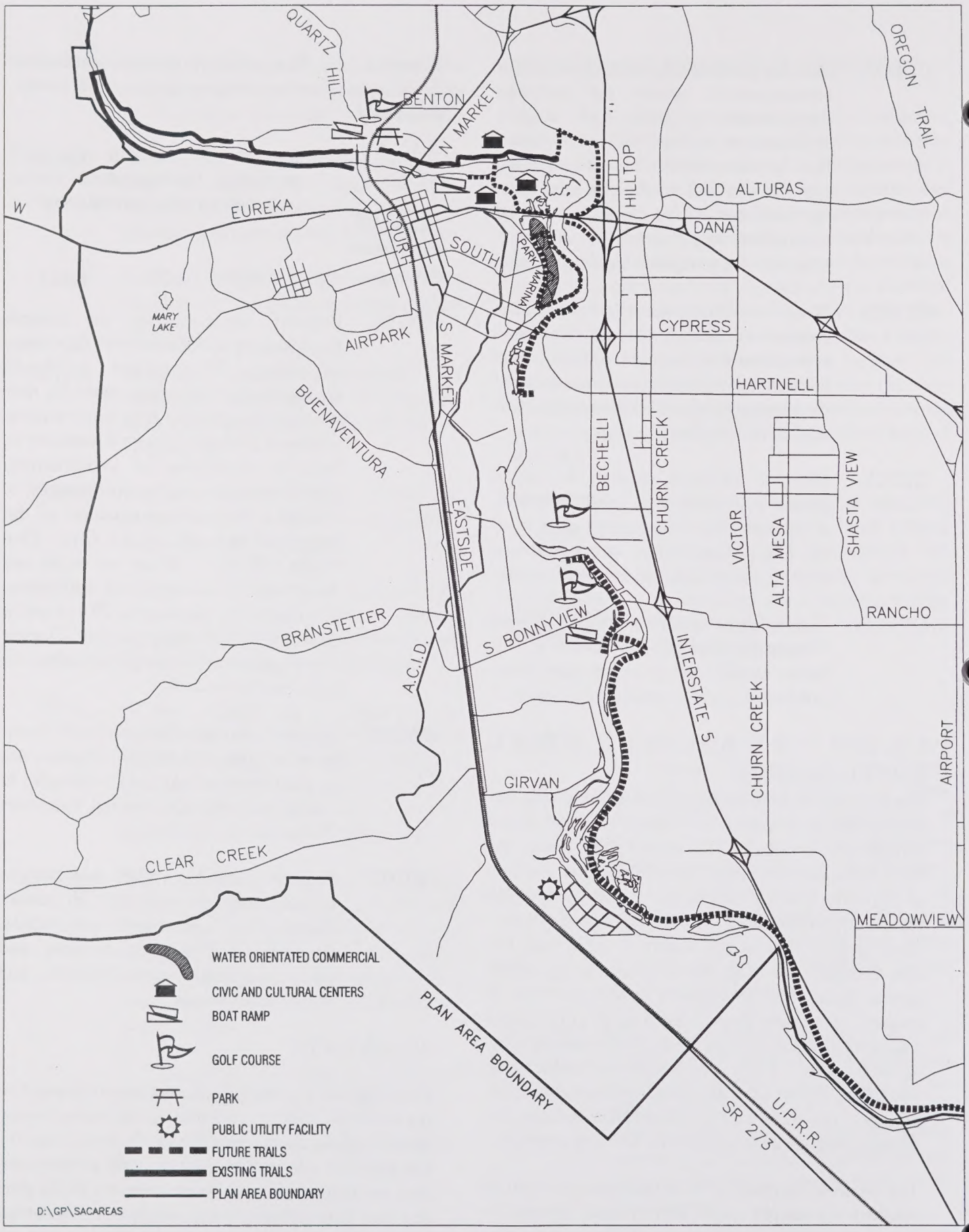


Figure 1-2 Sacramento River Recreational, Cultural, And Commercial Areas

The following policies recognize the value of the river and its tributary streams to the vitality of Redding.

GOAL

CDD4

PROTECT AND ENHANCE THE RELATIONSHIP BETWEEN THE CITY AND THE SACRAMENTO RIVER.

Policies to achieve this goal are to:

CDD4A. Preserve significant trees and other vegetation along the banks of the Sacramento River, while emphasizing passive recreation and providing opportunities for active uses.

CDD4B. Continue acquisition of key lands along the river and the other area waterways to provide passive, nonmotorized public access and to preserve important ecological values and sensitive habitats. This may be accomplished by a combination of public and private land purchases, donations, dedications, granting of public easements, the use of life estates, and similar mechanisms.

CDD4C. Continue to develop active and passive public-use facilities and trails along portions of the riverfront as generally depicted on Figure 1-2. Expand public-use areas and pedestrian and bicycle trails as additional lands are made available, while limiting impacts to existing wildlife habitat and developed properties.

CDD4D. Establish public open-space and pedestrian/bicycle links between the river and parks, activity centers, schools, and other major open-space areas such as stream corridors.

CDD4E. Give priority to the expansion of existing vehicle bridges over the construction of additional bridges. If new bridges are constructed, they should be designed to complement their surroundings and views of the structure from the river and trails.

CDD4F. Design open-space accessways to complement existing development and, where applicable, protect the privacy and security of adjoining residences.

GOAL

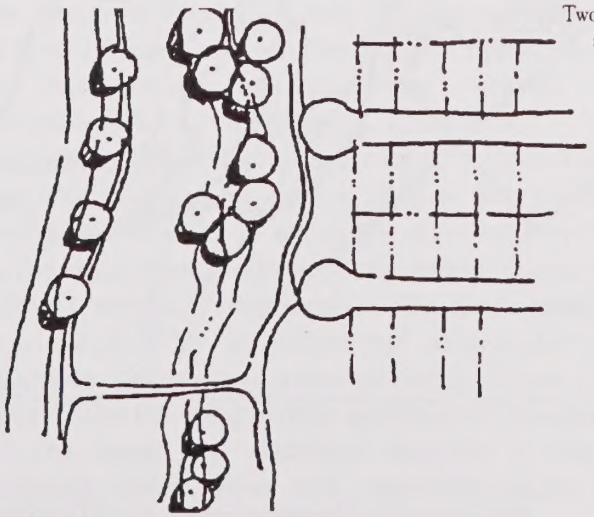
CDD5

ENSURE A PROPER RELATIONSHIP BETWEEN STREAM CORRIDORS AND URBAN DEVELOPMENT.

Policies to achieve this goal are to:

CDD5A. Establish appropriate development standards along those stream corridors depicted in Figure 1-3 in order to:

- Promote the aesthetic value of the adjacent natural area.
- Provide public views and access to the stream corridor.
- Protect the privacy and security of adjacent residences.



Two methods of providing public view and access to a str (Policy 5

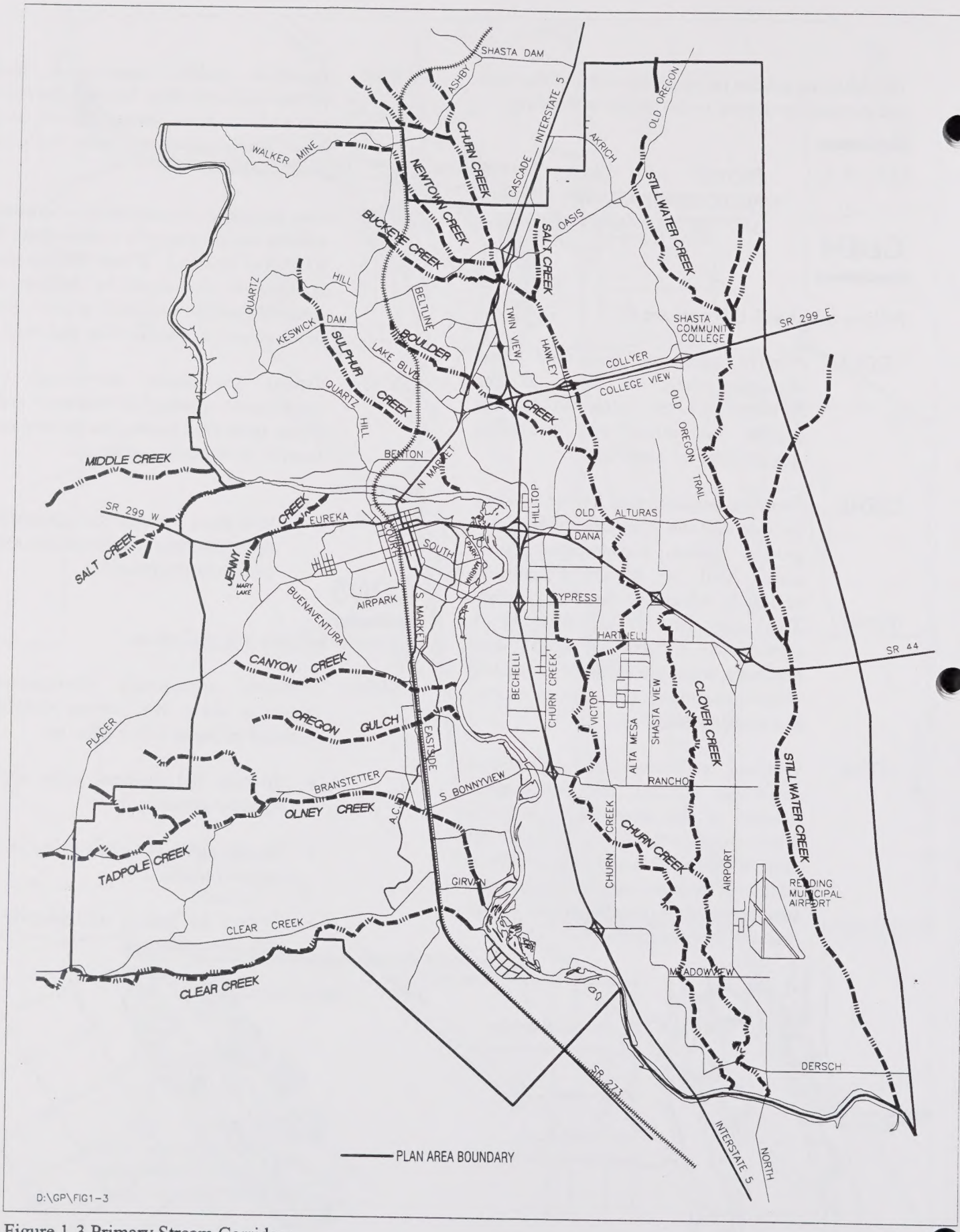


Figure 1-3 Primary Stream Corridors

GOAL

CDD6

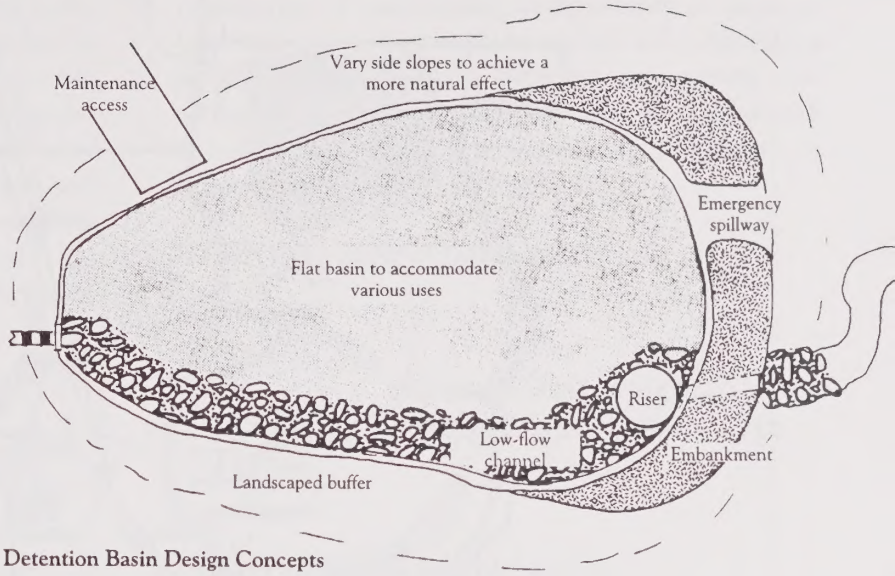
PROVIDE FUNCTIONAL AND ATTRACTIVE STORMWATER, DETENTION/RETENTION BASIN FACILITIES THAT WILL ALSO ALLOW RECREATIONAL USES.

Policies to achieve this goal are to:

CDD6A. Limit the use of retention basins to those circumstances where detention facilities are not hydrologically feasible or where it can be determined that the proposed retention basin will be an asset to the development and community.

CDD6B. Where practicable, design basins with minimal depths, natural shapes, and varying side slopes to accommodate limited recreational, open-space, and other uses. Provide landscape to enhance the visual appearance of the basin from adjacent development and public areas.

CDD6C. Design large detention basins to accommodate active recreational pursuits such as softball, soccer, and other similar uses.



Detention Basin Design Concepts

HILLSIDES

Development, as a result of open-space policies established in 1970, has established a well-defined pattern of open space in and around the City. These areas, generally floodplains (see "Waterways" above) and steep hillsides, have remained largely undeveloped and thus provide an important network of interconnected "greenways" throughout the community. Hillside areas also provide further relief from urbanization and lend a natural feel to the community. In order to effectively minimize erosion and the visual impacts which can result from excessive grading in steeper hillside areas, careful consideration should be given to the design and construction of projects on sites containing average slopes of 8 percent or more. The following policies are designed to ensure that the visual and ecological integrity of areas containing steep slopes and important ridges is maintained. Some degree of vegetation modification may be necessary for wildland fire management.

GOAL

CDD7

RETAIN THE NATURAL APPEARANCE OF STEEP HILLSIDE AREAS AND DESIGNATED RIDGE LINES.

Policies to achieve this goal are to:

CDD7A. Protect the visual integrity of prominent ridge lines that can be viewed from key public gathering areas, the river, visitor destinations, and community gateways. These ridge areas are depicted on Figure 1-4. Utilize one or more of the following measures to avoid or minimize development impacts:

- Public or private purchase of lands, the use of conservation easements, or similar measures.
- Performance standards, including limitations on building heights and/or increased ridge-line setbacks and standards for use of appropriate building forms, colors, and materials that blend into their surroundings.

CDD7B. Establish hillside development standards to: (1) decrease allowable residential

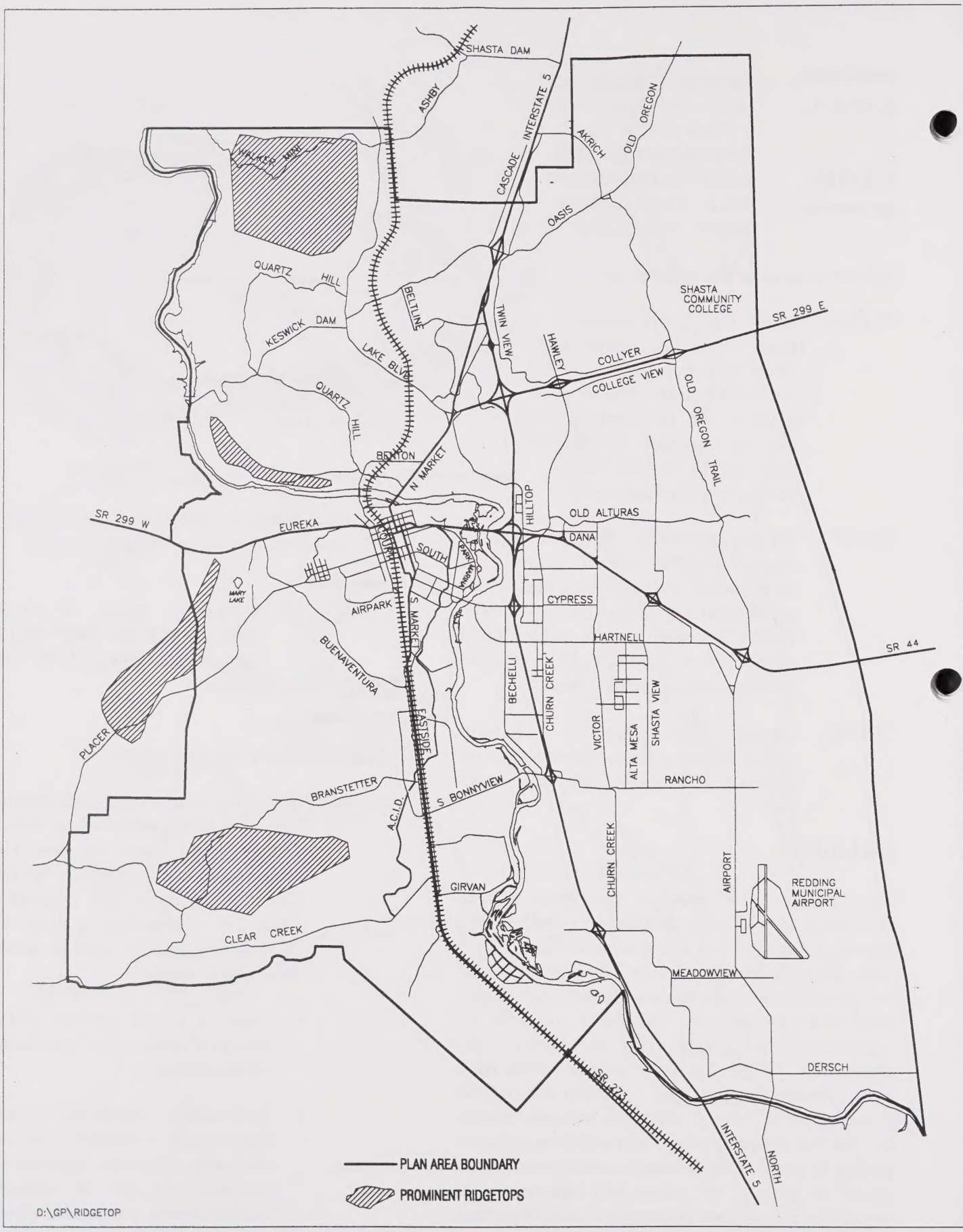
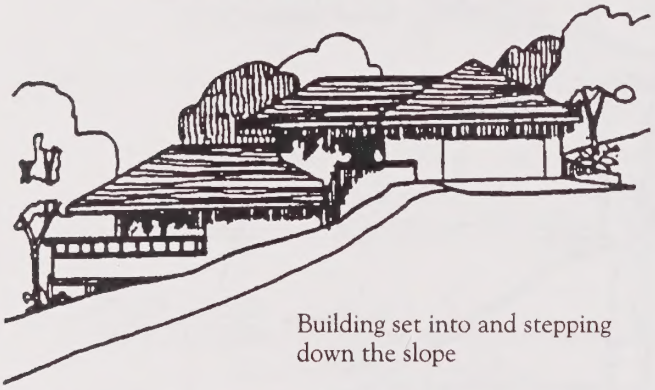


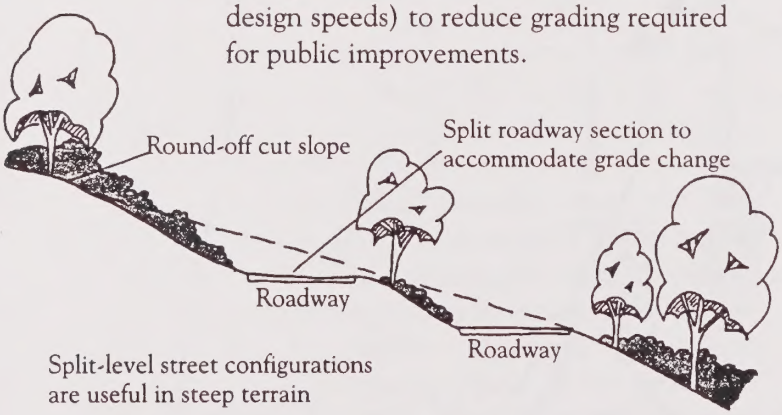
Figure 1-4 Prominent Ridgetops

densities as the slope of a development site increases; (2) limit site grading on steep slopes; (3) require use of multiple levels, where appropriate, so buildings are set into and step down the hill; and (4) minimize disturbance of native trees and other vegetation outside the building, yard, and driveway areas, while providing appropriate levels of wildland fire protection. Require revegetation of disturbed areas.



Building set into and stepping down the slope

CDD7C. Establish alternative road standards in hillside developments (split-level road configuration and reduced widths and design speeds) to reduce grading required for public improvements.



Split-level street configurations are useful in steep terrain

BUILT ENVIRONMENT

Care must be taken to ensure that the manmade environment complements the City's natural environment. Further, the various elements that make up the manmade environment influence how the City looks and the image it presents, as well as how various land uses interact with one another. This section addresses a variety of factors that influence the image of the City from an urban perspective, including streets, building heights and setbacks, signs, utilities, and downtown development. It also addresses the importance of maintaining compatibility of adjacent land uses. A key element is to provide a flexible means of achieving a balance between the natural and manmade environment and the costs associated with ensuring distinctive development. (Refer to Community Design Plan, Figure 1-5.)

DEFINING THE COMMUNITY

GOAL **CDD8**

PROMOTE THE DEVELOPMENT OF A COHESIVE, WELL-DEFINED CITY.

Policies to achieve this goal are to:

CDD8A. Maintain well-defined community edges using open-space buffers, greenbelts, agricultural lands, stream courses, clustered development, and other appropriate types of landscape and design features.

CDD8B. Provide community "gateway" treatments, including signage and landscape, particularly in locations depicted on Figure 1-5. Provide Downtown "gateway" treatments at appropriate locations.

CDD8C. Link special community facilities, parks, and other uses to and through the Downtown by establishing clear, convenient, and attractive pedestrian and vehicle connections.

GOAL **CDD9**

PRESERVE EXISTING COMMUNITY CHARACTER AND FABRIC AND PROMOTE THE DEVELOPMENT OF LIVABLE AND COHESIVE NEIGHBORHOODS AND DISTRICTS.

Policies to achieve this goal are to:

CDD9A. Encourage the preservation and rehabilitation of historically or architecturally significant districts, buildings, and structures.

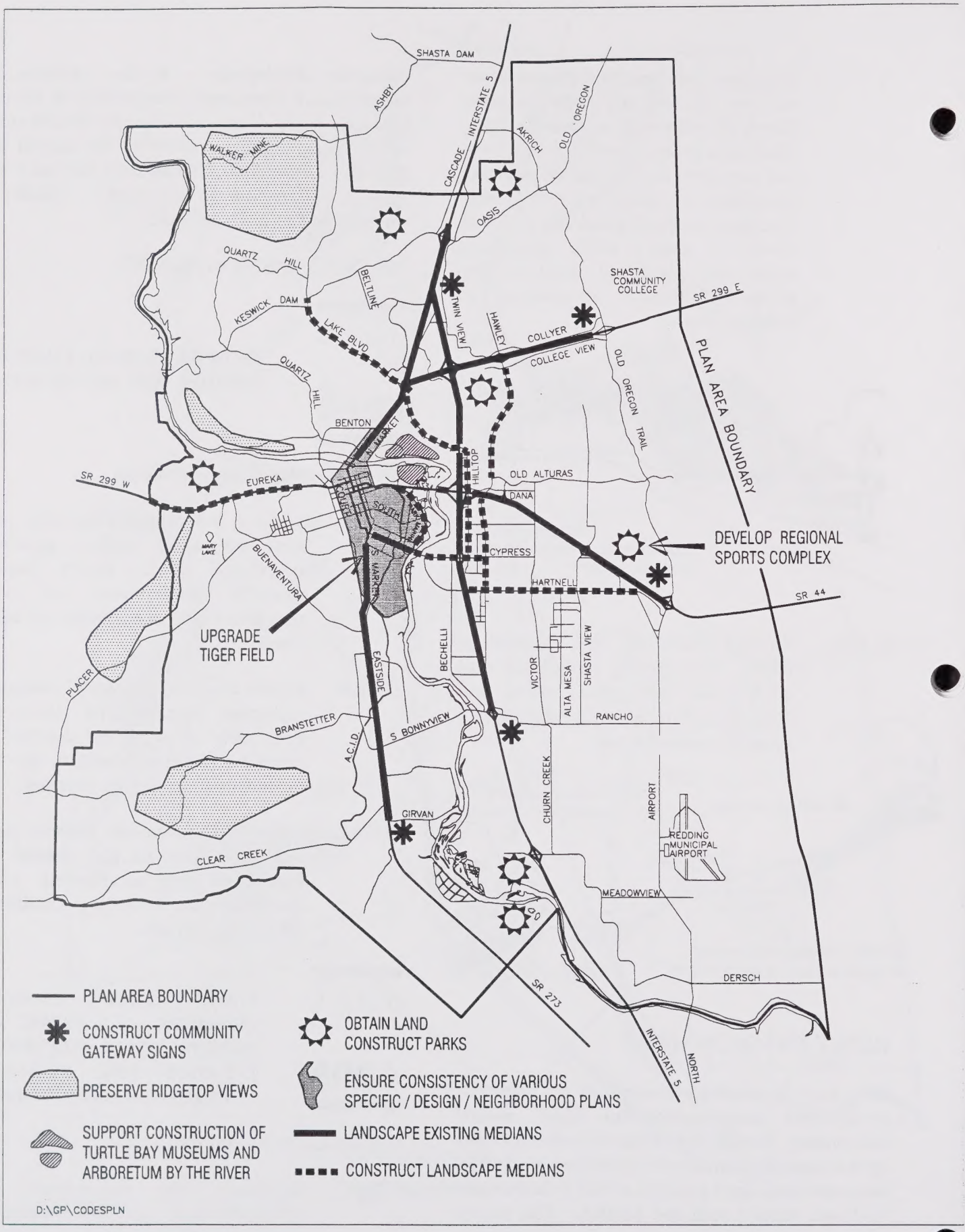


Figure 1-5 Community Design Plan

CDD9B. Establish standards for infill projects in existing residential neighborhoods that respect existing neighborhood scale and character.

CDD9C. Establish design standards for new development that will create more livable and aesthetically pleasing neighborhoods. Promote compatibility between land uses by minimizing impacts to privacy, views, and noise and from intrusion of nonneighborhood traffic.

CDD9D. Design projects to provide gradual transitions between multiple-family and single-family districts and between commercial and residential districts by considering appropriate techniques such as:

- Density/intensity transitions.
- Landscape buffers/trails.
- Building placement.
- Height transitions.

PROMOTING COMPACT URBAN FORM/TRANSPORTATION ALTERNATIVES

The suburban development pattern typical in the United States since World War II, has come under much criticism in recent years for contributing to excessive dependency on the automobile. The land use patterns found in most suburban areas use large amounts of land, often at the expense of agricultural land and natural habitat areas. Traditional suburban development patterns tend to encourage the use of the automobile by rigidly separating residential, employment, and shopping areas. At the same time, the lower densities often make alternative modes of transportation less feasible. It is also felt by many that suburban development patterns promote monotonous developments with no social or cultural centers and few distinct neighborhoods or districts.

More recent urban-design strategies attempt to correct these perceived deficiencies by promoting more compact urban land use patterns. This approach focuses on locating residential, employment, and shopping areas closer to one another. One method used to accomplish this involves provisions which allow mixed-use development patterns. This concept has historically been applied in downtown areas where buildings may be developed with stores on the bottom floor and apartments in the upper stories. However, vehicle trips and auto dependency can also be reduced by allowing small commercial and service-oriented uses within or adjacent to other residential areas. The use of higher residential densities, particularly along major transportation corridors, can substantially improve the use and efficiency of transit systems. In addition, the creation of linkages and pathways between neighborhoods and other destination points can be used effectively to encourage the use of alternative modes of transportation. More compact development patterns have also been found to reduce the costs associated with providing municipal services and facilities.

The intent in Redding is not to restrict the opportunity for low-density development throughout the City, but to provide incentives for the development of more dense, mixed-use projects which can positively impact the City's transportation system. This approach, together with some of the other concepts identified above, will be used to limit sprawl and traffic problems which are so prevalent in other communities. Additional benefits will include the preservation of more open space and creation of a more livable community.

GOAL

CDD10

PROVIDE FOR A PATTERN OF DEVELOPMENT THAT:

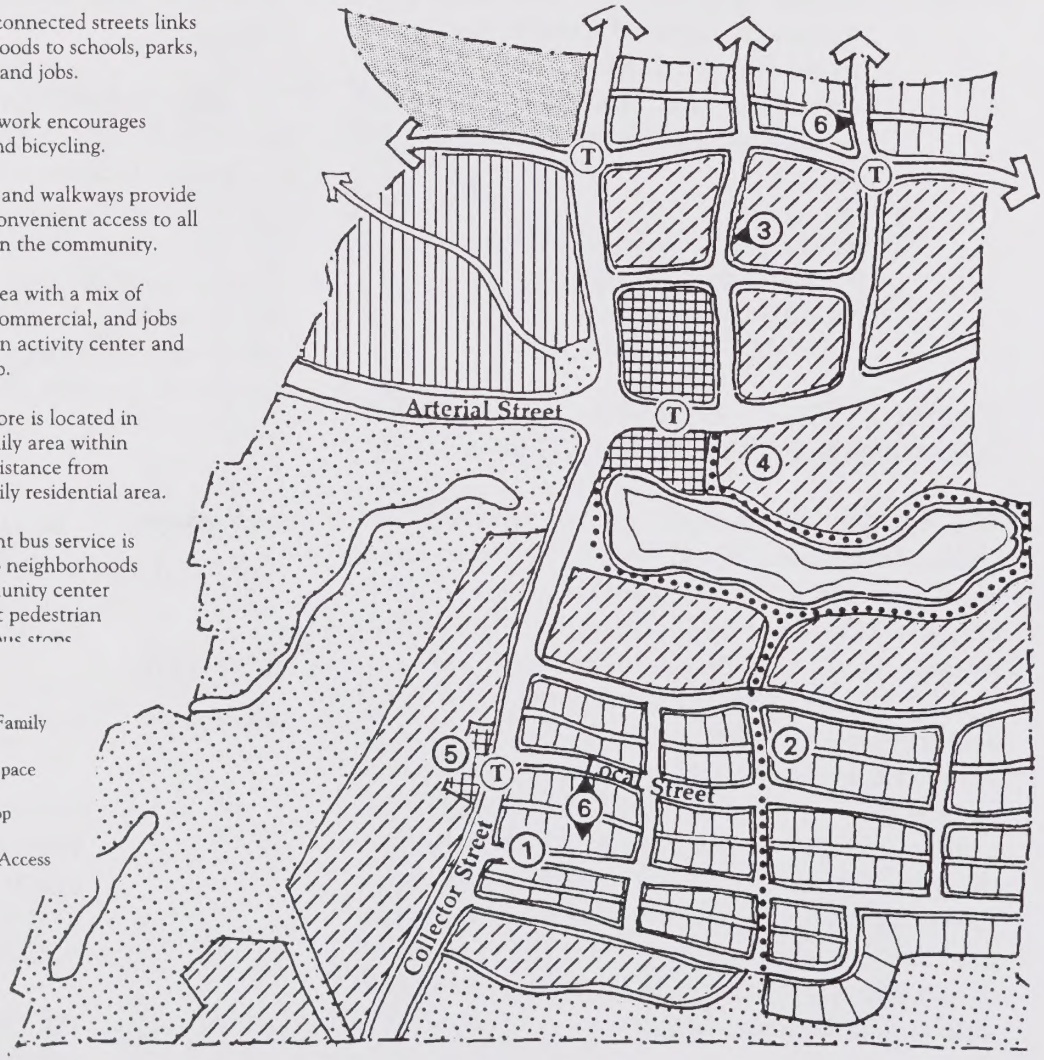
- ESTABLISHES DISTINCT NEIGHBORHOODS, DISTRICTS, AND ACTIVITY CENTERS.
- LINKS OPEN-SPACE AREAS TO EACH OTHER AND TO DEVELOPED AREAS SUCH AS PARKS, SCHOOLS, RESIDENCES, AND COMMERCIAL DEVELOPMENTS.
- PROMOTES MIXED-USE DEVELOPMENTS.
- PLACES EMPLOYMENT, SHOPPING, AND OTHER ACTIVITY CENTERS IN OR NEAR RESIDENTIAL NEIGHBORHOODS.
- ENCOURAGES WALKING, BICYCLING, AND TRANSIT USE.

Policies to achieve this goal are to:

CDD10A. Where topography, creeks, or other natural features cannot be used, utilize the circulation system and the pedestrian and bicycle pathway systems as important structural elements to define neighborhoods and districts.

CDD10B. Provide for development of residential uses in conjunction with a mixture of local-serving retail and service uses at appropriate locations.

1. A grid of connected streets links neighborhoods to schools, parks, shopping, and jobs.
2. Street network encourages walking and bicycling.
3. Sidewalks and walkways provide safe and convenient access to all activities in the community.
4. Central area with a mix of housing, commercial, and jobs becomes an activity center and transit hub.
5. A small store is located in multi- family area within walking distance from single-family residential area.
6. Convenient bus service is possible to neighborhoods and community center with direct pedestrian access to bus stops.



CDD10C. Establish incentives for infill development and reuse of underutilized parcels in transit corridors.

CDD10D. Incorporate public transit stops and bus shelters in the design of new development and redevelopment of older projects when consistent with approved transit plans and policies. Ensure safe and efficient access, particularly for handicapped individuals.

CDD10E. Establish incentives for medium- to high-density, mixed-use developments, where appropriate, with emphasis on Downtown and in the "Mixed Use Neighborhood Overlay" Districts.

CDD10F. Provide comprehensive transportation facilities, including bicycle and pedestrian routes. Integrate pedestrian and bicycle routes into developments to provide alternative access to public and private parks and open space, transit stops, nearby commercial developments, and schools.

CDD10G. By use permit, allow small neighborhood-serving stores to be established in all districts where they will not unduly impact existing neighborhoods.

RESIDENTIAL LAND USE GUIDELINES

The density and location of residential land uses is key to effectively implementing the compact urban form and transportation alternatives discussed in the previous section. However, care must be given to respect the current or desired character of existing neighborhoods. The introduction of uses, such as schools, churches, and day-care facilities, can provide focal points in residential areas, but also has the potential to create conflicts or adversely impact those uses immediately adjacent to them. Therefore, the potential impacts of those facilities should be considered and mitigated to the fullest extent possible. One of the community's desires is to have more livable and distinctive neighborhoods which incorporate quality design features and amenities. Strategies to encourage this type of development focus on incentives rather than regulatory mandates.

The General Plan Diagram establishes density ranges within the various residential land use classifications. As a component of the implementation of this Plan, the City will initiate rezonings of residential properties to apply parcel-specific densities within the assigned density range. Rezoning may also be initiated by individual property owners.

GOAL

CDD11

ENSURE THAT NEW RESIDENTIAL DEVELOPMENT IS WELL-LOCATED AND WELL-DESIGNED AND CAN ACCOMMODATE A MIXTURE OF HOUSING TYPES AND USES.

Policies to achieve this goal are to:

CDD11A. Maximum residential densities within a given range are appropriate only for those projects that demonstrate superior design features and amenities.

CDD11B. Establish residential design standards that address natural features, visibility of structures, variations in building design, garage placement, usable open space, access, and the relationship to surrounding uses. Site constraints may dictate that the maximum number of lots allowed by the General Plan classification for a given parcel of land may not be realized.

CDD11C. When zoning single-family residential areas within designated density ranges, use density afforded by the previous General Plan. Exceptions will be made where site topography, access, availability of utilities, and/or existing neighborhood character indicate that development potential should be either increased or reduced by zoning action.

CDD11D. Allow residential developments to include a mix of residential densities and dwelling types, provided that the proposed development is in scale with the neighborhood and that the total dwelling unit count is consistent with the applicable General Plan density range depicted on the General Plan Diagram.

CDD11E. Allow day-care facilities, churches, residential care facilities for the elderly, public and private schools, small grocery stores and other neighborhood-serving uses, and other ancillary uses in residential neighborhoods, provided that they are located and designed to be compatible with the neighborhood.

CDD11F. Allow by use permit guest houses/second residential units in single-family residential districts where appropriate. The principle residence must be owner-occupied.

CDD11G. Prohibit the creation of flag lots in developed areas where these lots are not in character with the neighborhood.

CDD11H. Locate multiple-family housing throughout the community, but especially near transportation corridors, Downtown, major commercial areas, and neighborhood commercial areas.

NEIGHBORHOOD PRESERVATION AND ENHANCEMENT

As part of its efforts to foster community pride and strengthen community identity, the City intends to support measures that improve and maintain healthy neighborhoods. Signs of a healthy neighborhood include clean streets, low crime rates, attractive buildings and yards, and active and responsible residents. While a city government cannot create such a neighborhood by itself, it can implement policies that establish the framework necessary for neighborhoods to develop and improve. The policies listed below are intended to aid the efforts of citizens seeking to enhance the quality of life in their neighborhoods and to prevent blight.

GOAL **CDD12** — ENSURE THAT NEIGHBORHOODS ARE ATTRACTIVE, SAFE, AND WELL-MAINTAINED.

Policies to achieve this goal are to:

CDD12A. Promote and assist in the establishment of neighborhood and homeowner associations that will provide a focal point and social structure in neighborhoods.

CDD12B. Promote neighborhood involvement in the safety and maintenance of neighborhoods by encouraging the following types of activities:

- Volunteer services.
- Public parks and facilities renovations.
- Neighborhood clean-up programs.
- Neighborhood Watch programs.

CDD12C. Continue selective neighborhood projects such as the Community Oriented Policing Program.

CDD12D. Promote stronger neighborhood/school partnerships, including joint use of City and school facilities.

CDD12E. Adopt a Property Maintenance Ordinance or other appropriate mechanisms to address:

- Building maintenance.
- Yard maintenance.
- Fencing.
- Maintenance of vacant properties.
- Assistance programs under appropriate circumstances.
- Vegetation management fuel-reduction areas.

CDD12F. Establish priorities for infrastructure improvements based in part on neighborhood needs.

CDD12G. Enforce minimum housing standards for all rental properties.

COMMERCIAL LAND USE GUIDELINES

One of the primary goals of the General Plan is to create a balanced economic base to provide a full range of employment opportunities for Redding's residents. In order to meet this goal, an appropriate amount of commercial and industrial land needs to be designated in a variety of locations to attract and accommodate the widest range of potential businesses. The industrial component is addressed in the Economic Development Element of this General Plan.

Within the City's economic development strategy, a careful balance also needs to be maintained between attracting new businesses and protecting the economic vitality of other parts of Redding, particularly the Downtown area. Significant effort and investment has gone into and will continue to be put into revitalizing the heart of the City. Therefore, it is essential that other land use decisions reinforce that objective.

In addition to providing employment opportunities and tax revenues, commercial and industrial land uses can also have a significant impact on the appearance and image of a community. Careful planning is necessary to ensure that unsightly "strip" development patterns and visual clutter, such as can occur with inappropriate or excessive signage, are not perpetuated. The incorporation of plazas and gathering places within nonresidential development projects can be used to provide additional opportunities for individuals to interact and foster a greater sense of community. The appearance of nonresidential development projects can also be improved through implementation of basic design guidelines. All of these actions combined will contribute to the successful integration of commercial

and industrial land uses and the overall goal of improving the attractiveness of the City.

GOAL CDD13

DESIGNATE COMMERCIAL LANDS IN APPROPRIATE LOCATIONS TO MEET THE PRESENT AND FUTURE NEEDS OF REDDING'S RESIDENTS AND VISITORS AND TO IMPROVE THE CITY'S ECONOMIC VITALITY.

Policies to achieve this goal are to:

CDD13A. Ensure that adequate commercial lands are identified on the General Plan Diagram to meet existing and projected market demand for local and regional commercial activity. Amendments to the Diagram will be considered only when there is a demonstrated need for additional commercial land. Demonstrating only that a particular location would be economically viable for an intended use will not constitute sufficient grounds for a General Plan amendment.

CDD13B. To the extent feasible, direct regional-serving uses to existing centers prior to developing a new regional center. Limit "Regional Commercial" land use to those locations so classified.

CDD13C. Designate land for commercial uses in locations and configurations so as to eliminate the potential for new "strip commercial" development areas. Do not approve subdivisions along arterial streets that will lead to strip commercial development patterns.

CDD13D. Require overall development plan approval for all shopping centers, including regional centers, before allowing the development of individual uses within the center.

CDD13E. Require regional centers to include a mix of uses such as recreation, specialty retail, restaurants, offices, and accommodations for transit services and public uses.

GOAL CDD14

ENCOURAGE PROJECT DEVELOPMENT WHICH IS COMPATIBLE WITH SURROUNDING PROPERTIES AND WHICH IMPROVES THE IMAGE OF THE CITY.

Policies to achieve this goal are to:

CDD14A. Establish design and performance standards for commercial development to ensure that building and site design are compatible with their surroundings in terms of scale, mass, building patterns, building details, location of parking, signage, and landscape and enhance views from major streets and other public areas.

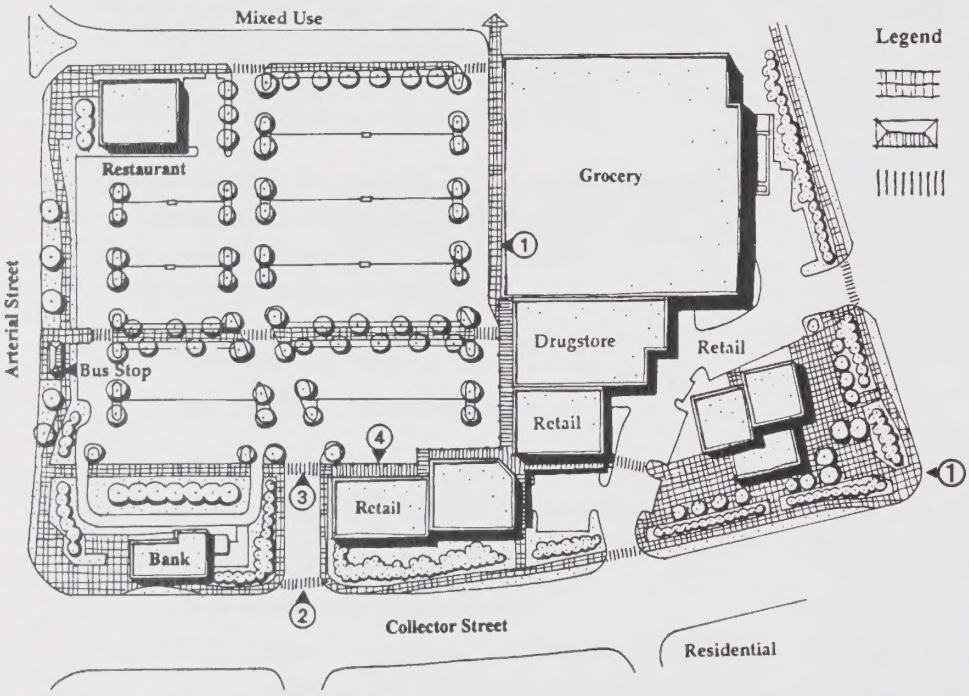
CDD14B. Create an incentive program to encourage proposed projects to provide site amenities, site design, and building design that clearly exceed expected standards by providing:

- Unique project relationship to the surrounding community.
- Strong, consistent design style throughout the project.
- Imaginative solutions to providing development features such as:
  - Signs.
  - Parking lots.
  - Screening and enclosing elements.
  - Project lighting.
  - Public art.
  - Landscape and water features.
  - On-site and off-site pedestrian spaces and linkages.

CDD14C. Require the design of large commercial projects, shopping centers, and regional-scale developments to incorporate plazas, courtyards, and other outdoor gathering places and connections to adjacent residential neighborhoods.

SIGNS

Signs play a vital role in identifying business locations for the traveling public. However, excess or poorly designed and placed signs can detract significantly from the community. Expensive, well-designed signs can be rendered useless if there is too much visual clutter that drowns out the functionality of individual signs or if the sign next door blocks the view of the sign. Typically, the cure has been to install larger more powerful signs to compete with the motorist's eye. The end results are sign clutter; loss of community; wasted advertising effort; and, of course, greater cost for businesses.



1. A wide, safe walkway and pedestrian plaza in front of stores.
2. Driveways located away from fronts of stores to minimize conflicts between pedestrians and cars.
3. Safe internal pedestrian access and circulation with connections to surrounding properties.
4. Canopies in front of stores offer weather protection to the patrons.

Illustration courtesy of the Snohomish County Transportation Authority, 1993.

GOAL CDD15

STRIKE A BALANCE BETWEEN BUSINESS NEEDS TO IDENTIFY THEIR LOCATION TO THE TRAVELING PUBLIC AND THE IMPACTS TO THE STREET SCENE THAT CAN RESULT FROM EXCESS OR POORLY DESIGNED SIGNAGE.

Policy to achieve this goal is to:

CDD15A. Ensure that the City's Sign Ordinance adequately addresses allowable sign area, placement, and design parameters for signs.

STREETS

The memories or impressions that one has of a city are often based on what is viewed from inside a car. Because streets and their immediate surroundings ("streetscapes") are important to visitor and resident, it is important to recognize their value beyond just transportation and vehicle safety. Streets shape the community in profound ways and create vital links among neighborhoods and between commercial and other nonresidential areas. The pattern of streets in a city, their width and design elements—like sidewalks, curbs, and landscape—are an integral part of creating an attractive and desirable community.

Arterial/Collector Streets

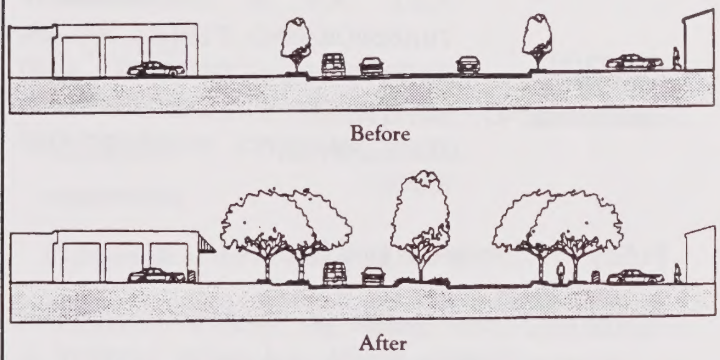
Arterial streets should be constructed with sufficient visual amenities to improve the experience of both vehicle passengers and pedestrians. Generally, this requires the use of landscape to break up and soften the street scene by utilizing landscaped medians and sidewalks surrounded by appropriate landscape and an established tree canopy.

GOAL **CDD16**

IMPROVE THE VISUAL ATTRACTIVENESS OF THE CITY'S ARTERIAL AND COLLECTOR STREETS; IMPROVE PEDESTRIAN SAFETY.

Policies to achieve this goal are to:

CDD16A. Determine priorities and establish a program to retrofit existing arterial streets to include median and street-side landscape.



Adding landscape can enhance the attractiveness of streets.

CDD16B. Provide sufficient right-of-way for sidewalks and street-side and median landscape and necessary utilities along new arterials and new collector streets. Install such improvements with the construction of the street where appropriate.

CDD16C. Utilize street tree-planting as a unifying visual element along the streets; establish a street tree-planting and maintenance program.

Residential Streets

Residential streets offer their own unique set of challenges to enhance their visual quality. There should be variety in the streets, both in width and design. Short streets with low traffic volumes should be relatively narrow, perhaps with parking restricted to one side only. Higher-level residential streets (also known as "residential collectors"), while wider, should not have excessive width; visual interest for both vehicle passengers and pedestrians can be enhanced through the use of detached sidewalks (or "parkways"). Parkways should be of sufficient width to allow tree-planting as well as utility trenches if required.

The width of a street's paving often correlates with how fast a driver will feel safe to drive. Streets that are unnecessarily wide tend to encourage faster travel. Since slower traffic is desirable in residential areas, allowing narrower street widths and/or installing appropriate "traffic-calming" mechanisms can help accomplish that goal.

GOAL **CDD17**

PROVIDE RESIDENTIAL STREETS THAT ARE DESIGNED TO REDUCE VEHICLE SPEED, THAT ENCOURAGE PEDESTRIAN USE, AND THAT ARE AESTHETICALLY PLEASING.

Policies to achieve this goal are to:

CDD17A. Allow a variety of street widths and designs to be incorporated into new residential developments based on the function of the various streets. Pavement width should generally be limited to the minimum necessary to adequately meet circulation demands and emergency-vehicle access.

CDD17B. Encourage new neighborhoods to incorporate detached sidewalks and to establish landscaped "parkways" between the curb and sidewalk. Continuous and consistent tree-planting to form canopy closure is encouraged.

GOAL **CDD18**

REDUCE THE VISUAL IMPACT OF UTILITIES AND COMMUNICATION FACILITIES.

Policies to achieve this goal are to:

CDD18A. Place new electric distribution lines underground in new development.

CDD18B. Place existing overhead distribution lines underground upon development of the abutting property where feasible.

CDD18C. Establish a mechanism to systematically underground distribution lines in existing neighborhoods and commercial areas as funding sources are identified.

CDD18D. Establish standards for communication towers and equipment to promote the use of screening or other techniques to reduce visual impacts.

CDD18E. Design and locate pump stations, electric substations, backflow prevention devices, traffic signal controllers, electric boxes, and similar utility facilities so as to minimize noise and visual impacts to the community.

RELATIONSHIP BETWEEN BUILDINGS AND STREETS

The height of buildings and the distance that they are set back from the street play important roles in the overall character of a community. For instance, the presence of tall buildings can draw attention to certain districts in the City as viewed from major thoroughfares. Buildings constructed close to the street can contribute to establishing an urban feel in Downtown or, with greater setbacks, a suburban feel to areas outside of Downtown. For Redding, taller buildings with minimal setbacks should be encouraged Downtown to distinguish it from other commercial districts and to help provide an urban "heart" for the City. Major thoroughfares will generally have larger setbacks; the buildings shorter in stature. Minimal setbacks may also be appropriate for new mixed use districts that are contemplated by this Plan.

GOAL CDD19

HAVE BUILDING SETBACKS AND HEIGHTS REFLECT THE ROLE AND CHARACTER OF THE VARIOUS DISTRICTS OF THE CITY.

Policies to achieve this goal are to:

CDD19A. Establish appropriate standards for buildings, massing, height, and setbacks for residential and commercial developments on arterial and collector streets that will define and reinforce the character of development districts in the city.

GOAL CDD20

ENLIVEN THE PUBLIC DOMAIN BY PROMOTING EXCELLENCE IN PUBLIC ART AS A MEANS OF TRANSFORMING PUBLIC SPACES, PROVIDING CONTEXT AND RELEVANCE, AND CONTRIBUTING TO COMMUNITY INTEREST AND PRIDE.

Policy to achieve this goal is to:

CDD20A. Utilize public art to create identifiable districts, places, and special locations in the public domain.

- Encouraging the integration of art into the architecture of municipal structures, facilities, parks, open space, and other public areas.
- Involving artists and specialized design professionals in the design, implementation, and integration of art in public projects.

ADMINISTRATION AND IMPLEMENTATION

The General Plan Diagram identifies the general distribution of various land use classifications throughout the Planning Area. Because of the scale, it may be difficult to determine the precise location of boundaries between map land use classifications and/or the actual extent of hazard areas associated with steep slopes or flooding. In some instances, more than one land use classification may be applied to a single parcel of land, requiring that the appropriate mix of uses and allowable density be determined on an individual basis. In order to streamline minor interpretations of the General Plan Diagram and reduce the need for General Plan amendments in such circumstances, the City of Redding has established the following policies for land use administration procedures.

GOAL

CDD21

ENSURE PROPER AND EFFICIENT ADMINISTRATION OF THE GENERAL PLAN DIAGRAM.

Policies to achieve this goal are to:

CDD21A. Permit the Board of Administrative Review and/or Planning Commission to reconcile land use classification boundaries to coincide with legal parcel boundaries and actual flood and slope areas provided that land use compatibility is maintained, that the integrity of each land use district is maintained, and that there will be no adverse impacts of such boundary adjustment. Such actions will not constitute a General Plan amendment.

CDD21B. Allow the Planning Commission to determine the appropriate mix and density of development on parcels shown on the General Plan Diagram as divided into two or more land use classifications based on policies of the General Plan. Such actions will not constitute a General Plan amendment.

Routine review of the General Plan is critical if the City is to ensure that the Plan continues to be consistent with community values, social and economic trends, and changing technology. Further, routine review of the Plan can identify how well the City implements the policies of the Plan. The following policy addresses review of the General Plan.

GOAL

CDD22

PROVIDE FOR THE ONGOING IMPLEMENTATION OF THE GENERAL PLAN.

Policies to achieve this goal are to:

CDD22A. The Planning Commission shall review the General Plan annually, focusing principally on actions undertaken in the previous year to carry out the implementation programs of the Plan. The Planning Commission's report to the City Council shall include, as the Commission deems appropriate, recommendations for amendments to the General Plan. This review shall also be used to satisfy the requirements of Public Resources Code 21081.6 for a mitigating monitoring program.

CDD22B. Conduct a major review of the General Plan every five years and revise it as deemed necessary.

FOCUS AREAS

The General Plan Diagram is limited in its ability to provide detailed guidance on development at a neighborhood level. Likewise, broad, citywide policies often cannot adequately convey how the General Plan envisions certain smaller areas of the City to develop. Whether these areas are entire neighborhoods or are limited to a few blocks or parcels, this section of the Land Use Element serves to fine-tune the General Plan Diagram and policies relating to various portions of the Planning Area. The areas described below have their own unique development constraints and opportunities. For purposes of this Plan, these areas are referred to as "focus areas."

Each of the identified focus areas is discussed separately in this section. It shows how the existing character of each area has been influenced by previous development and how new development can be channeled to resolve existing problems or capitalize on opportunities. City policies that direct future development and capital improvements in each area are presented where appropriate. Policies discussed within the text of each focus area are illustrated by accompanying diagrams.

SPECIFIC FOCUS AREAS

DOWNTOWN FOCUS AREA

The Downtown area includes Redding's original town site, which was platted in 1872. The early vitality of the town was spurred by railroad activity as well as copper and gold mines located north of town. Downtown still contains a number of early century buildings, while the oldest neighborhoods in the City are located nearby. Construction of the Downtown Mall in 1973 significantly changed the face and vehicular circulation patterns of the Downtown core.

Retail activity Downtown began to falter with the construction of Interstate 5, which bypassed the Downtown business district. As new retail businesses located (and existing businesses relocated) near freeway interchanges, Downtown retail activity began to give way to more and more office uses. Over the past several years, a very strong interest has developed in resurrecting Downtown as the social, governmental, and cultural center of the community.

To capitalize on the potential afforded by the Downtown, new development in that area should assume a different character than new development in the rest of the community. Downtown Redding should be a place for pedestrians first and automobiles second. It should also present a more urban character than the rest of the City. Instead of setting buildings far back from the street, they should be close to the street. Instead of buildings being far apart, they should be close together and continuous. Ground-floor uses should be active, including retail, restaurants, and entertainment.

The most intense and tallest buildings in the City should be located in the Downtown core. Buildings should have several doors for people to enter shops and businesses instead of a few doors with large expanses of blank walls. The ground floors of buildings should have clear windows so that inside activity is visible to people on the street, rather than mirrored glass or opaque walls. Building designs should allow for display windows and other areas of interest to encourage pedestrians to walk around and shop.

Because of the desire to establish a strong pedestrian orientation in Downtown, buildings should be designed so that people are protected from the weather by using overhangs, shade structures, and canopy trees. Buildings should be designed to encourage midblock pedestrian circulation by utilizing and improving existing alleyways.

To create the desired pedestrian atmosphere, on-street parking will be retained Downtown. Only limited amounts of parking should be located on individual lots. Most parking will be clustered in common lots or structures. When parking structures are developed, they should include retail frontages on the ground floor. Parking garages without retail frontage have the same impact as large blank walls—neither presents a pedestrian orientation.

The Downtown focus area includes provisions intended to: (1) encourage redevelopment in the area to establish Downtown as the office, entertainment, government, and cultural center of the City; (2) ensure that ample land is available Downtown for multiple-family development; and (3) establish Downtown as an active, pedestrian-oriented district.

Downtown Focus Area Development Guidelines

D1. Prepare, adopt, and implement a Downtown Specific Plan. Until such time as the plan is adopted, utilize the following general guidelines for reviewing development proposals:

a. Encourage office building developers to provide space for retail businesses to locate in the ground floors of buildings located in the commercial areas of the Downtown core.

b. Allow development of mid-rise buildings in the central portion of the Downtown area up to 8 stories in height.

c. Develop Downtown entry features at strategic locations.

d. Facilitate redevelopment of the Union Pacific property into a unified, mixed-use and/or cultural/entertainment complex which features ample public amenities and attractive streetscapes.

e. Allow development of high-density residential projects up to 50 units per acre.

f. Promote development of upper-scale garden apartments north and east of the Pine Street School; recognize the potential of the school to be the hub of neighborhood activity.

g. Allow outdoor uses such as restaurant seating, flower sales, and similar activities on private property and, where appropriate, on public property.

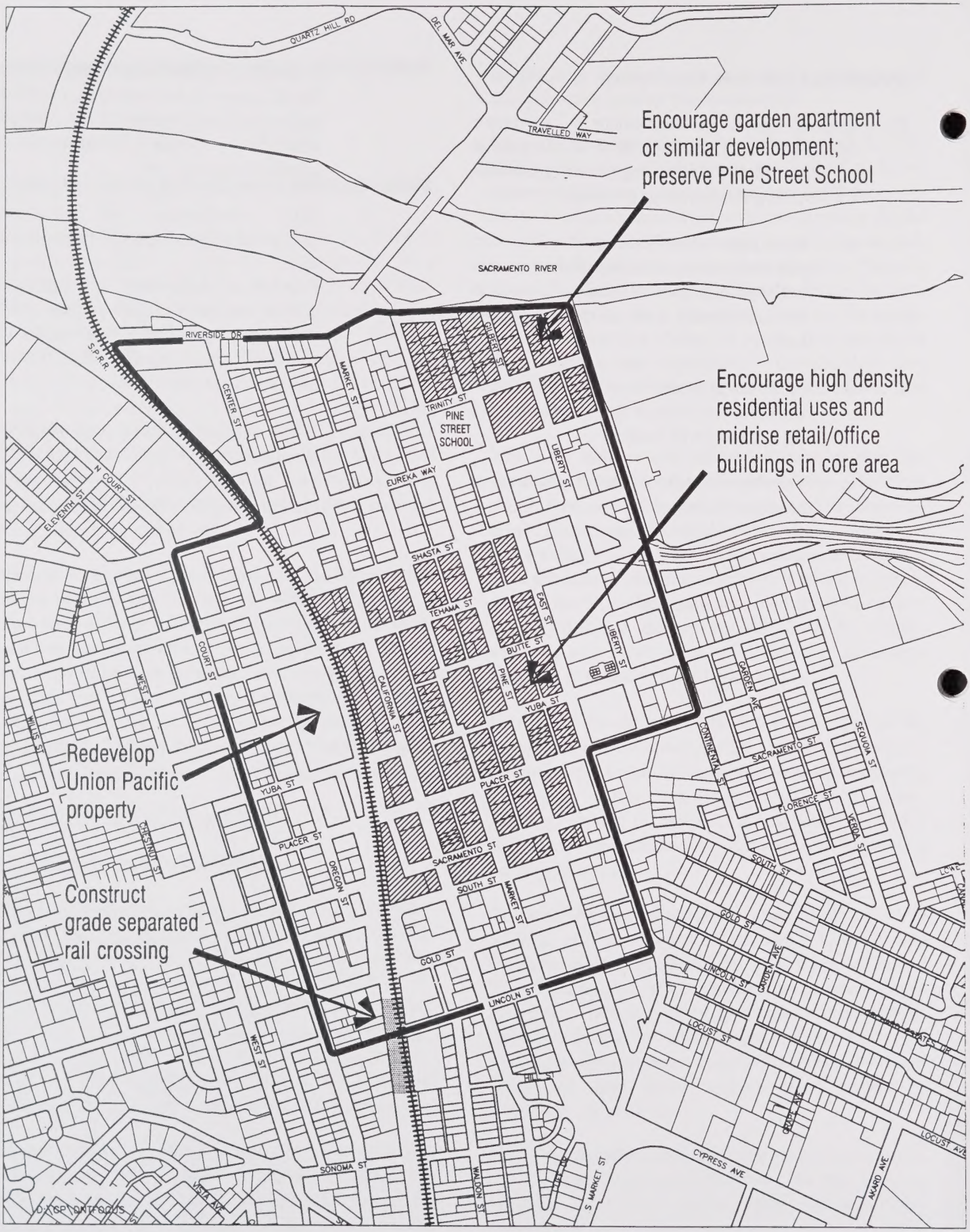


Figure 1-6 Downtown Focus Area

NORTH MARKET STREET

At one time the principal visitor-serving area in Redding, this portion of Old Highway 99 was known as the "Miracle Mile." With the construction of Interstate 5 in the 1970s, through traffic was diverted away from this area, while visitor services were provided at more convenient freeway interchange locations. While the Miracle Mile has languished over the years, it is poised once again to be a prime location for visitor services. The impetus for this revival will be the construction of the Turtle Bay Museums and Arboretum by the River complex, linked by a world-class pedestrian bridge. The City's riverfront regional park—Lake Redding/Caldwell Park—is also adjacent to the Miracle Mile corridor. From this location near the Sacramento River, visitors will be able to walk a short distance to these major attractions, making it a very convenient location to enjoy these first-class facilities.

In order to fully realize the potential, both land uses and development design must be given careful consideration. Uses should include lodging, restaurants, and small tourist-serving shops. Automobile-oriented uses, other than gas stations, should be discouraged. New development should be unique, well-designed, and should incorporate substantial landscape. The streetscape should be softened by landscaped medians and street-side planting. Signage should be understated.

North Market Street Development Guidelines

NM1. Prepare a comprehensive design plan for the corridor that incorporates landscape features, building design, and architectural materials.

NM2. Establish incentives for visitor-serving uses such as hotels, motels, restaurants, and small retail shops and limitations on new automobile-related uses.

NM3. Establish locational criteria for residential uses that favor locations outside the North Market Street corridor. Discourage residential uses in the North Market Street corridor area.

NM4. In cooperation with Caltrans, modify the existing street section to provide median and street-side landscape improvements; work with property owners to provide landscaping along the street frontages where feasible; develop a unified plan for landscape improvements.

NM5. Establish a pedestrian trail along Sulphur Creek, upstream of Market Street; explore a pedestrian crossing of North Market Street.

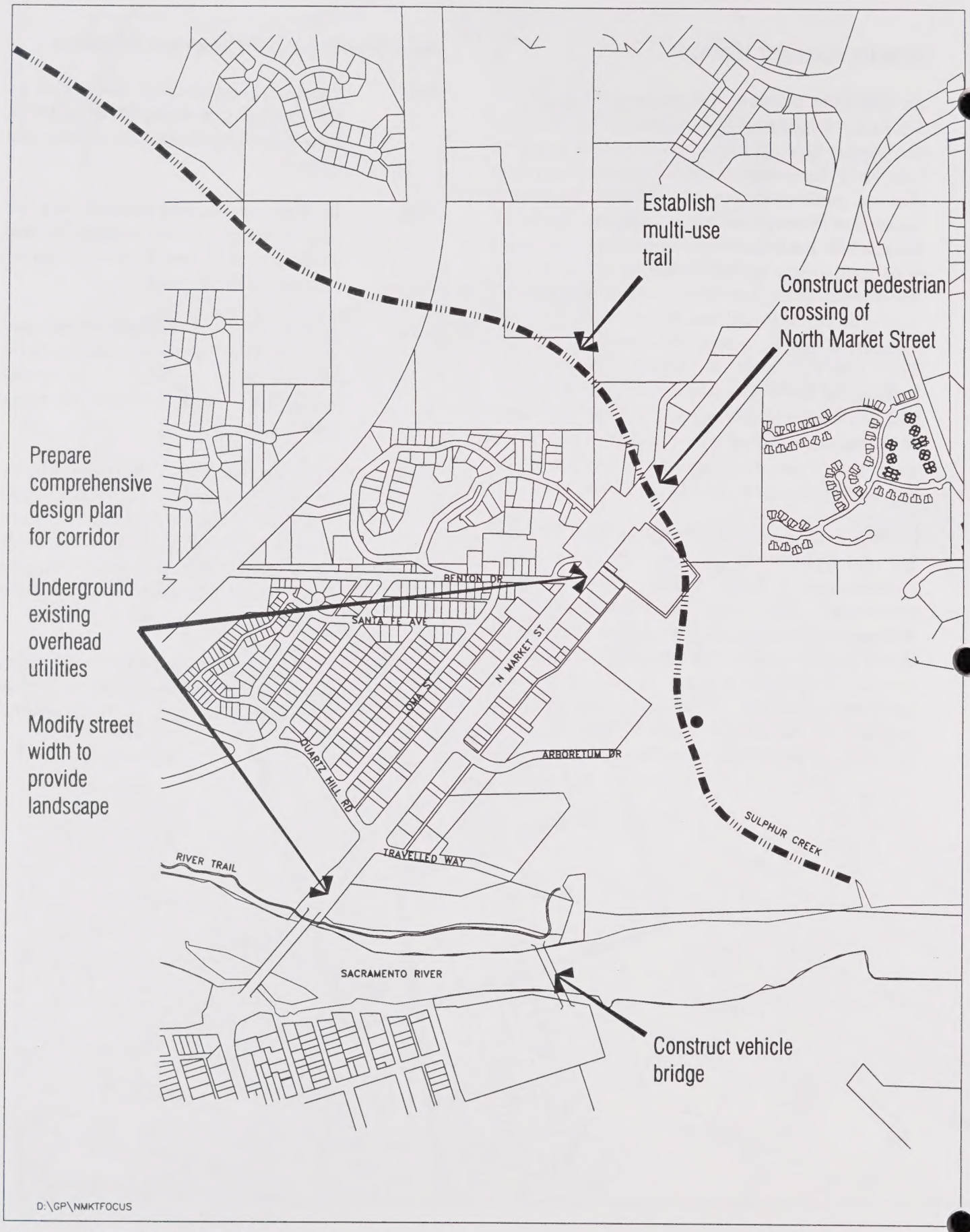


Figure 1-7 North Market Street Focus Area

PARK MARINA FOCUS AREA

The Park Marina area is one of the most visible waterfront areas within the community. Its proximity to Downtown and Turtle Bay Museums and Arboretum by the River makes the Park Marina area a perfect location for water-oriented businesses and tourist or recreation-related facilities. Because of the unique nature of this area and the importance its development will have on the community, a specific plan—known as the Redding Riverfront Specific Plan—was prepared and adopted for the 500-acre area in 1990. To ensure that future development in the Park Marina area is consistent with other recent community-enhancement and revitalization activities occurring in the vicinity, the community should reevaluate the existing Redding Riverfront Specific Plan and modify it as appropriate to complement the development theme being created in surrounding areas.

Park Marina Area Development Guidelines

PM1. Ensure that development within the Park Marina area is designed to maximize the unique opportunities created by its riverfront location and complement development activities within the Downtown and Turtle Bay Museums and Arboretum by the River.

PM2. Ensure that development in the Park Marina area is designed to retain and integrate natural features associated with the riverfront to the fullest extent possible.

PM3. Evaluate the Redding Riverfront Specific Plan, including plan area boundaries and amend it if necessary to ensure that development within the Park Marina area complements the Downtown Specific Plan, the Civic Center, and planned development activities at Turtle Bay Museums and Arboretum by the River. The residential densities and commercial intensities contained in the Redding Riverfront Specific Plan will not be reduced.

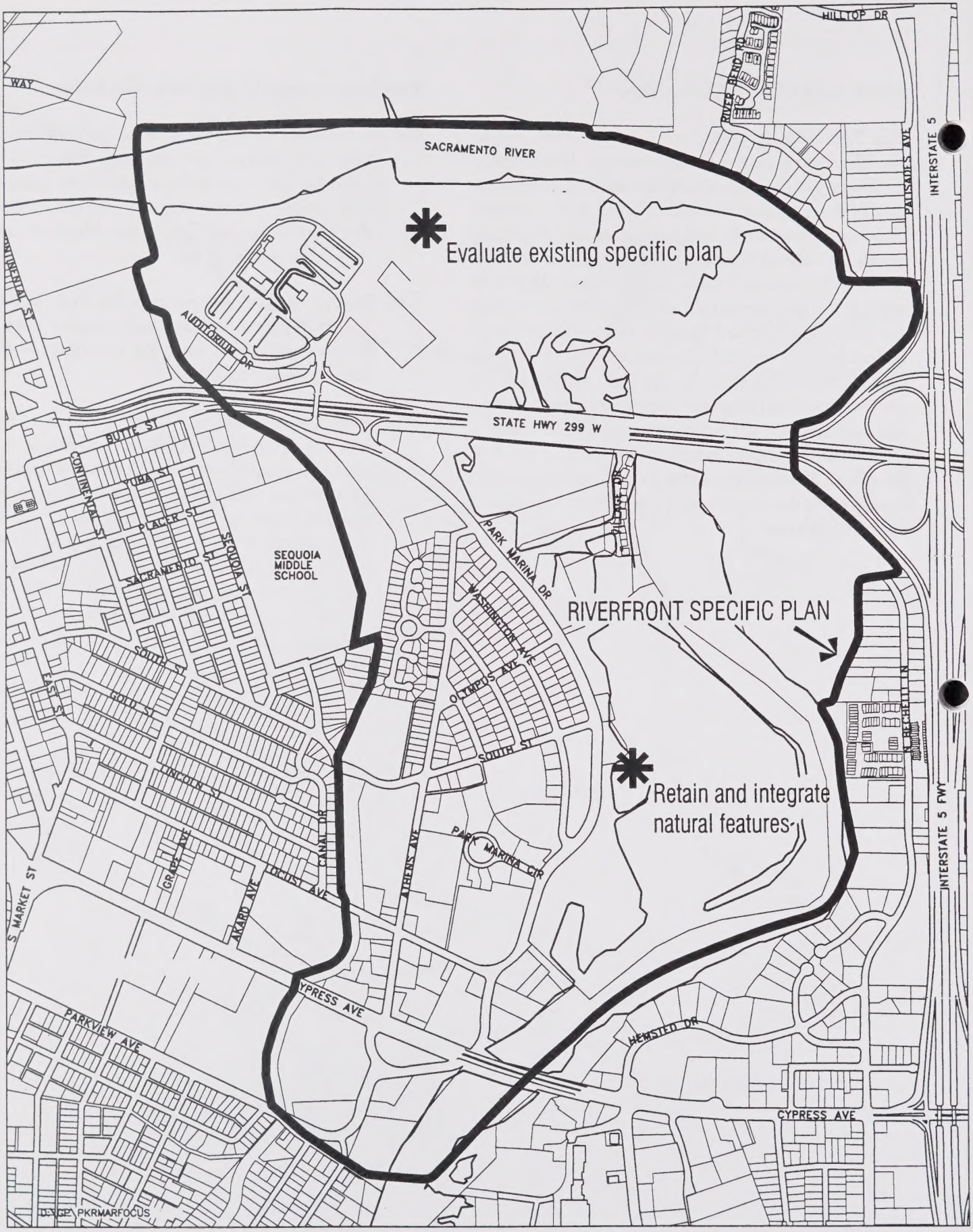


Figure 1-8 Park Marina Focus Area (Redding Riverfront Specific Plan)

MAGNOLIA NEIGHBORHOOD FOCUS AREA

The Magnolia Neighborhood is among the oldest neighborhoods in Redding. The neighborhood is replete with examples of turn-of-the-century to post-World War II era architecture, including California Bungalow, Craftsman style, Prairie style, and Mediterranean Revival, among others. In response to declining housing stock and the establishment of high-density land uses that were clearly incompatible with the neighborhood, the City adopted the "Magnolia Neighborhood Plan" in 1976. This plan reduced allowable residential densities to prevent the construction of additional high-density apartment projects, while establishing a moderate, multiple-family residential density throughout the neighborhood. This strategy has met with some success, but has also generated some concerns. On the positive side, the construction of additional three- to four-story apartment complexes was halted. However, smaller multiple-family units have been constructed at numerous locations in the neighborhood, having a negative impact on the original housing stock in their immediate vicinity. This is to say that the emergence of apartments in the neighborhood acted as a disincentive for residents to make investments in upgrading existing homes due to the uncertainty of what may be constructed nearby.

It is the policy of this Plan to recognize and preserve the single-family housing stock in the Magnolia Neighborhood. To that end, the General Plan Diagram depicts the entire Neighborhood as single-family, notwithstanding the existing multiple-family uses. The following policies recognize existing multiple-family uses and much of the multiple-family zoning where it currently exists in the neighborhood, but restrict the manner in which those units can be reconstructed in the event of severe damage or destruction. The intent is to ensure that any new multiple-family construction in the neighborhood is compatible with the area to the maximum extent feasible.

Magnolia Neighborhood Focus Area Development Policies

MN1. Conserve and enhance the Magnolia Neighborhood, as depicted on the Focus Area Diagram, as a "Single Family Residential" area.

MN2. Maintain "Multiple Family" zoning only for existing apartment complexes. Rezone areas that are predominately "Single Family" to a single-family mixed district that accommodates existing and new uses such as multiple single-family dwellings on a lot, guesthouses, and second units.

MN3. Establish standards for alterations or reconstruction of existing multiple-family structures to ensure neighborhood compatibility with respect to character, height, mass, form, setbacks, and materials.

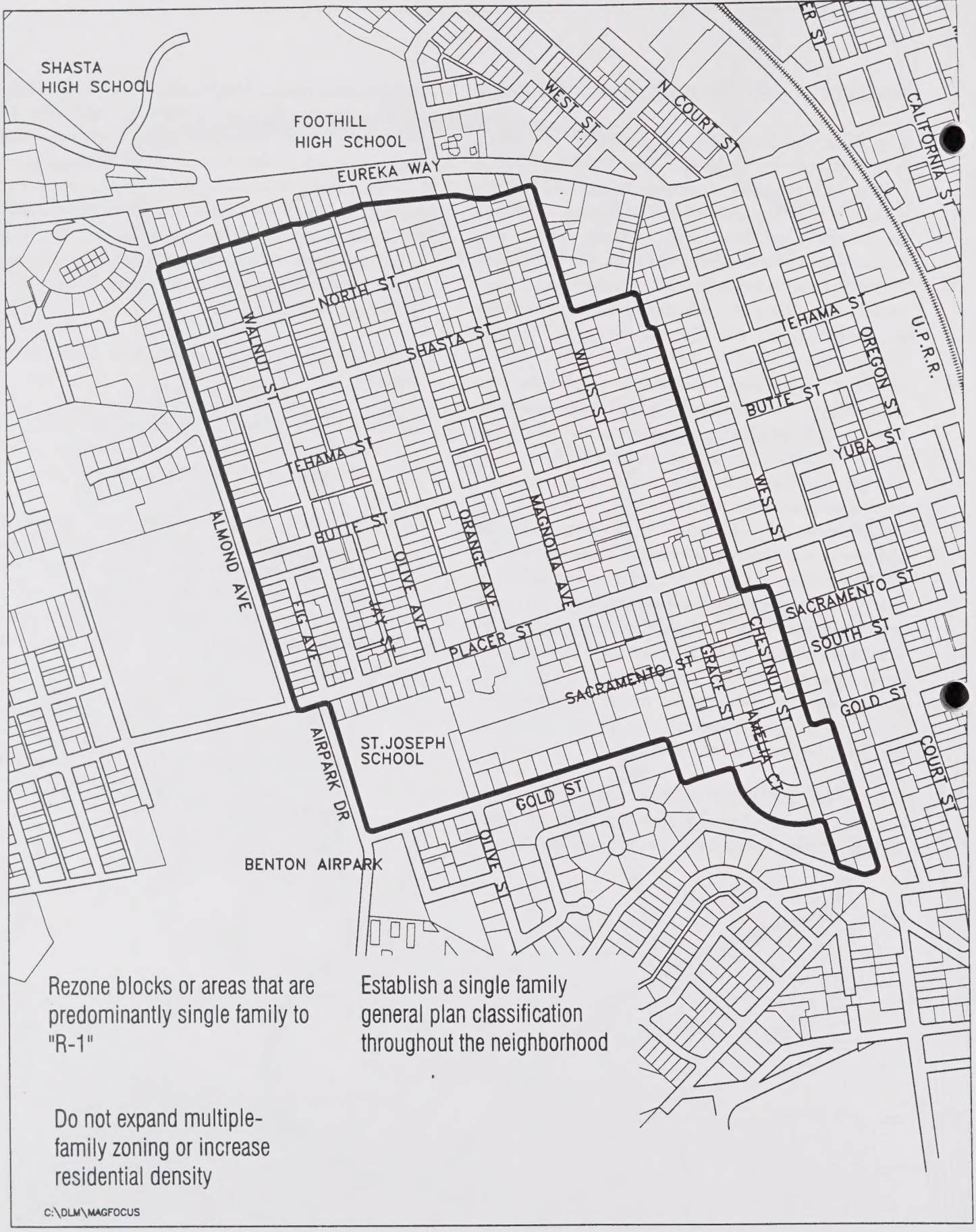


Figure 1-9 Magnolia Neighborhood Focus Area

STILLWATER CREEK/OLD OREGON TRAIL FOCUS AREA

The Stillwater Creek corridor is rural in nature, its main urban feature being Shasta Community College. The development pattern typical of the area ranges from rural residential lots (3 to 5 acres) in the vicinity of Whispering Oaks Subdivision to much larger hobby farms and agricultural businesses both north and south of the Community College. Prime agricultural soils can be found at various locations throughout the corridor. Its rural nature provides a natural edge between Redding's urban area to the west and the more rural lands to the east and provides a reserve of lands that will become critical for future urbanization.

Although the Planning Area and Sphere of Influence for Redding extends east of Stillwater Creek, the General Plan envisions that the area will remain rural over the next ten years or so. The General Plan Diagram establishes parcel sizes greater than five acres over much of the area, recognizing that the already fragmented ownership pattern will discourage urbanization. As the available land supply for housing in the Planning Area becomes more scarce over the next decade, there will be pressure to urbanize the larger, currently undeveloped parcels within the Stillwater Creek Focus Area. Construction of the Stillwater sewer trunk line or pumping into the Churn Creek watershed will provide ample capacity to serve this area with sanitary sewer, opening the area to urbanization. The City's Master Sewer Plan includes the Stillwater trunk line and necessary capacity increases to the Stillwater Sewer Treatment Plant as integral components of the City's growth strategy.

Stillwater Creek Focus Area Development Guidelines

SC1. Consider annexation and urban development when land availability for single-family uses elsewhere in the Planning Area declines in accordance with the policies of this Plan.

SC2. Work with Shasta County to identify those parcels with the greatest likelihood of accommodating future urbanization. Jointly develop a strategy that will facilitate such development.

SC3. Maintain the rural feel along the Old Oregon Trail corridor between Old Alturas Road and State Route 299E.

SC4. Provide opportunities for the establishment of commercial services and a mix of housing types near Shasta Community College.

SC5. Encourage the relocation of the existing automobile-dismantling business along Collyer Drive to an appropriate industrial district.

SC6. Incorporate Class 1 and 2 bike routes into project and street designs to facilitate nonmotorized access to the Community College.

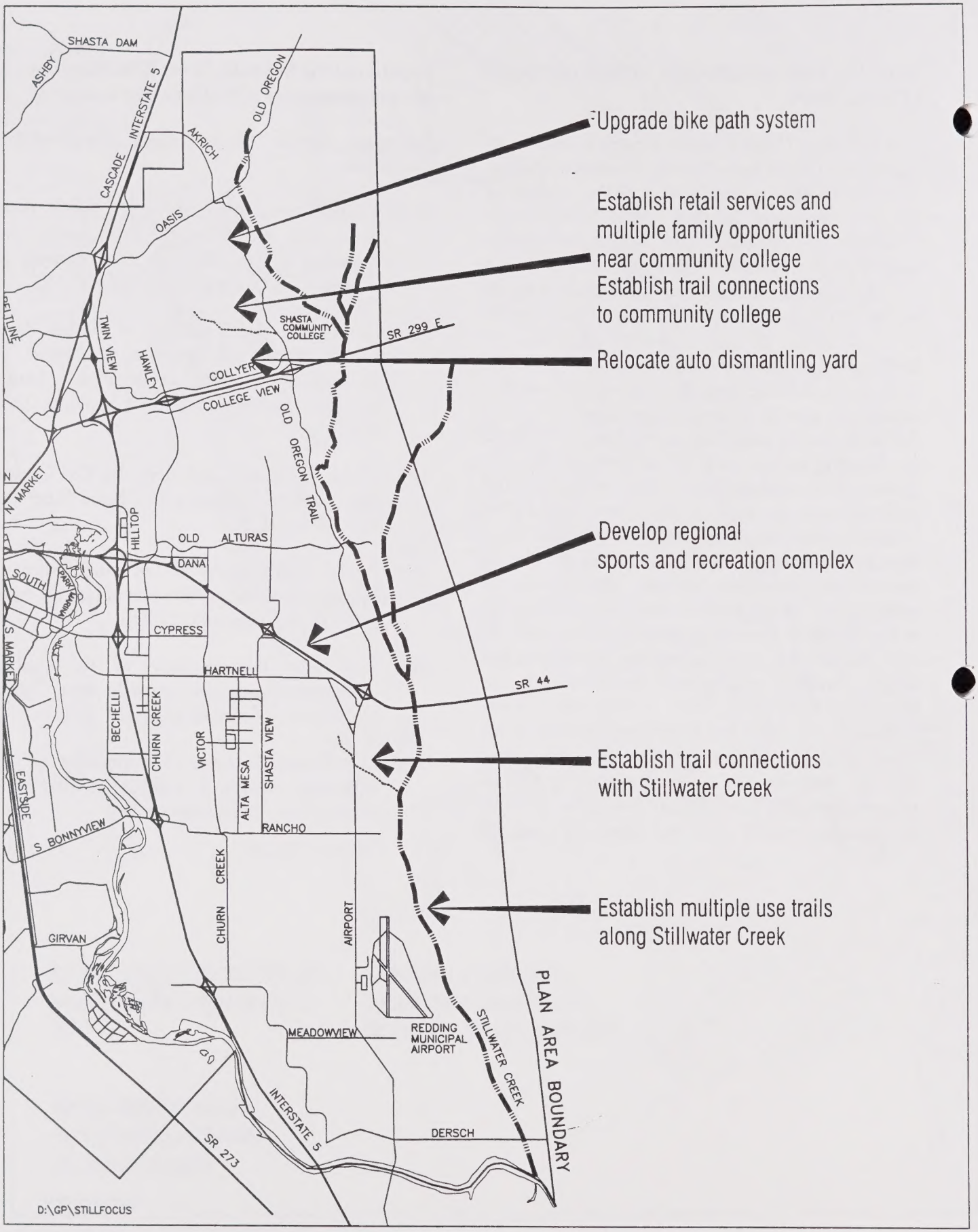


Figure 1-10 Stillwater Creek Focus Area

CLOVER CREEK FOCUS AREA

The seven-square-mile Clover Creek drainage basin is one of the more unique in the Planning Area. It is home to the majority of "special status" species of plants and invertebrates to be found in the area, including State and/or Federally listed (threatened or endangered) slender orcutt grass and the vernal pool tadpole and fairy shrimps. These species reside in the many vernal pools and vernal pool complexes found throughout the basin. Very little riparian vegetation is associated with the creek; however, "wet meadow" type wetlands are numerous.

The floodplain of Clover Creek is very wide, although the velocity and depth of flooding is minimal. It is estimated that as many as 100 structures are affected by the creek's floodplain during a 100-year event, some of which experience some flooding problems during storms of a lesser intensity.

In 1987, much of the basin was placed within the Clover Creek Sewer Assessment District. This district facilitated the construction of a trunk sewer line which was needed to open up the area for more intensive industrial, commercial, and residential development. Prior to construction of that line, septic systems were the only available means of sewage disposal, which severely restricted the basin's development potential. Given the proximity to the Redding Municipal Airport and the abundance of industrially zoned land, the area was a logical choice for increasing commercial intensities and residential densities.

A combination of the basin's wide floodplain, vernal pools, wetlands, and the sewer assessment district have complicated the development process in the basin to an extent not foreseen when the District was formed. Sewer assessments were established based on "channelization" of Clover Creek. This would have had the practical effect of reducing the floodplain to a significant degree, thereby affording properties with increased development potential. Assessments were established based on that increased potential. The existence of vernal pools and wetlands adds to the challenge of development, often requiring expensive mitigation measures and/or preservation of additional lands.

Times have changed since development of the basin was initially planned. Channelization is no longer seen as a viable option for the Creek from an environmental standpoint. The challenge is to find an acceptable balance between: (1) the development rights accruing to those paying sewer assessments, (2) reducing or eliminating flooding that presently occurs to existing structures, and (3) the policies of this Plan which restrict floodplain development and which seek to preserve, where possible, sensitive habitats. The following policies provide options for striking that needed balance.

Clover Creek Focus Area Development Guidelines

CC1. Construct a regional stormwater detention/ retention facility on Clover Creek that will serve to minimize or eliminate flood hazards and allow development in accord with this Plan.

CC2. Minimize the use of channelization to contain flood flows with new development, except those intended exclusively to facilitate industrial uses.

CC3. Establish a continuous trail system from Hartnell Avenue to Clover Creek's confluence with the Sacramento River and require subdivisions to provide adequate access to the Creek corridor where appropriate.

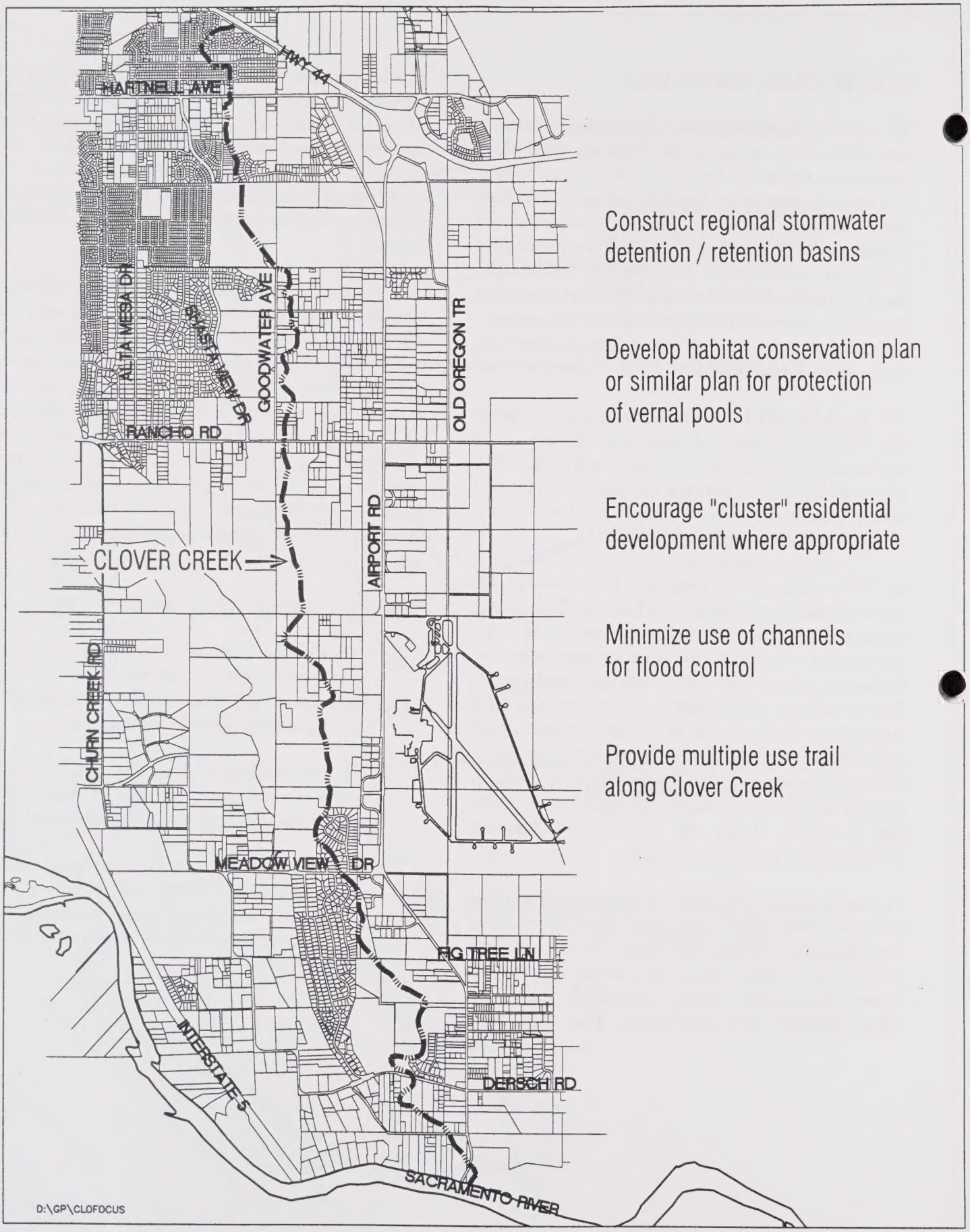


Figure 1-11 Clover Creek Focus Area

VICTOR AVENUE FOCUS AREA

This north-south arterial street lies within what was once known as Enterprise. This formerly unincorporated area was annexed to the City in 1976, well after the land use pattern between Hartnell Avenue and Mistletoe Lane was established. Land uses along the street are a mix of single-family, multiple-family, and commercial. It is the residential uses that are most impacted by existing and future traffic volumes, both in terms of vehicle noise and difficulty in accessing adjacent properties. Given projected traffic volumes, the street will eventually need to be widened to four lanes; direct street access to single-family residential parcels will not be acceptable.

To accommodate needed widening along this section of the street, the City has utilized two tools: (1) required street dedications in conjunction with development projects and (2) the purchase of a substantial number of properties along the west side of the right-of-way between Hartnell Avenue and East Cypress Avenue. These actions will allow the City to add two lanes to the street and provide a frontage road (if necessary) for those residential uses on the east side of the street, south of East Cypress Avenue, as generally depicted on the Focus Area Diagram.

A different planning solution is proposed for the residential area north of East Cypress Avenue. This plan allows a transition of uses from single-family to office uses to occur. The following policies illustrate the two mechanisms described to facilitate street-widening and reduce traffic conflicts along the street.

Victor Avenue Focus Area Development Guidelines

V1. Acquire sufficient right-of-way to widen Victor Avenue to four lanes and to construct a frontage road as necessary.

V2. Subsequent to street widening, allow office development to occur on the west side of Victor Avenue, generally between Cascade Lane and Mistletoe Lane subject to the following requirements:

- Minimum parcel size: 10,000 square feet.
- Common driveways may be required between new office uses.
- Development intensity must be consistent with the "Limited Office" classification of this General Plan and implementing zoning.

V3. Subsequent to street widening, allow medium-density residential development (6 to 10 units per acre) to occur on the east side of Victor Avenue, generally as depicted on Figure 1-12 subject to the following requirements:

- Minimum parcel size: 10,000 square feet.
- Common driveways may be required between residential developments.
- Development is limited to single-story construction.

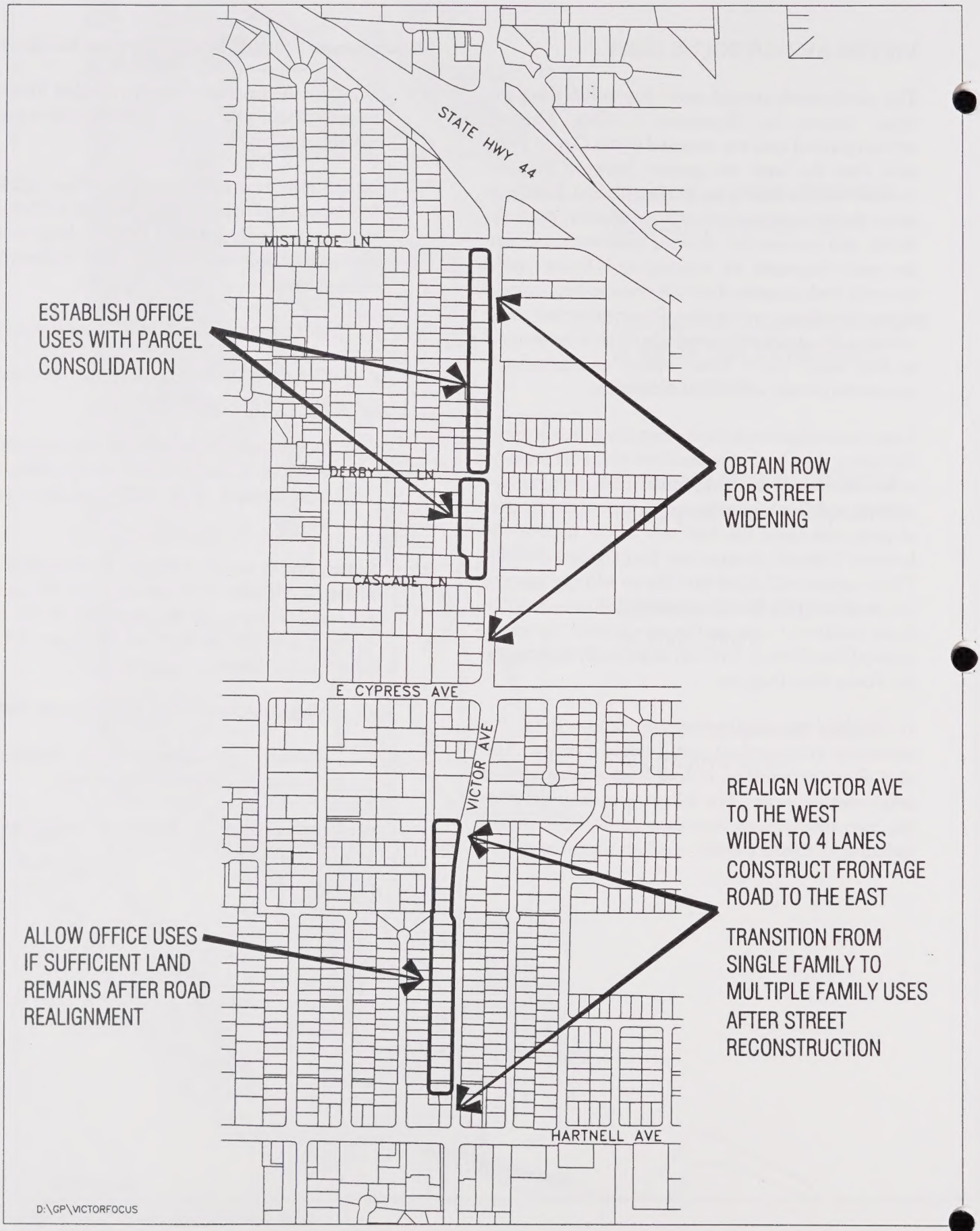


Figure 1-12 Victor Avenue Focus Area

HILLTOP/DANA DRIVE FOCUS AREA

The Dana Drive Focus Area got its start as a regional retail shopping area with the construction of the Mount Shasta Mall in 1971. While commercial development along the Hilltop Drive corridor continued, a virtual explosion in retail development occurred beginning in 1988 with the approval and construction of the Food-4-Less, Target, Costco, Wal-Mart, and similar regional-scale developments. Much of the infrastructure necessary for this growth was derived from actions taken by the Redding Redevelopment Agency, as well as assessment districts. Today, the Dana Drive/Hilltop Drive Focus Area serves the retail shopping needs of individuals within a 270-square-mile trade area. This activity not only provides necessary goods and services to a growing community, but makes a significant contribution of sales tax dollars to the City to fund public safety, planning, parks, and other important municipal functions.

For many people, especially visitors, this area is the gateway through which they see Redding. Maintaining this area as a successful regional commercial center, upgrading its visual appearance, and improving traffic circulation are critical to presenting a positive regional image.

Hilltop/Dana Drive Focus Area Development Guidelines

HD1. Retrofit arterial streets where feasible to include landscape medians and additional streetside landscape.

HD2. Install traffic light at intersection of Canby Road and Dana Drive.

HD3. Extend Browning Street between Hilltop Drive and Canby Road in a manner that is sensitive to existing residential areas on the north side of the street.

HD4. Construct improvements as noted on Figure 1-13.

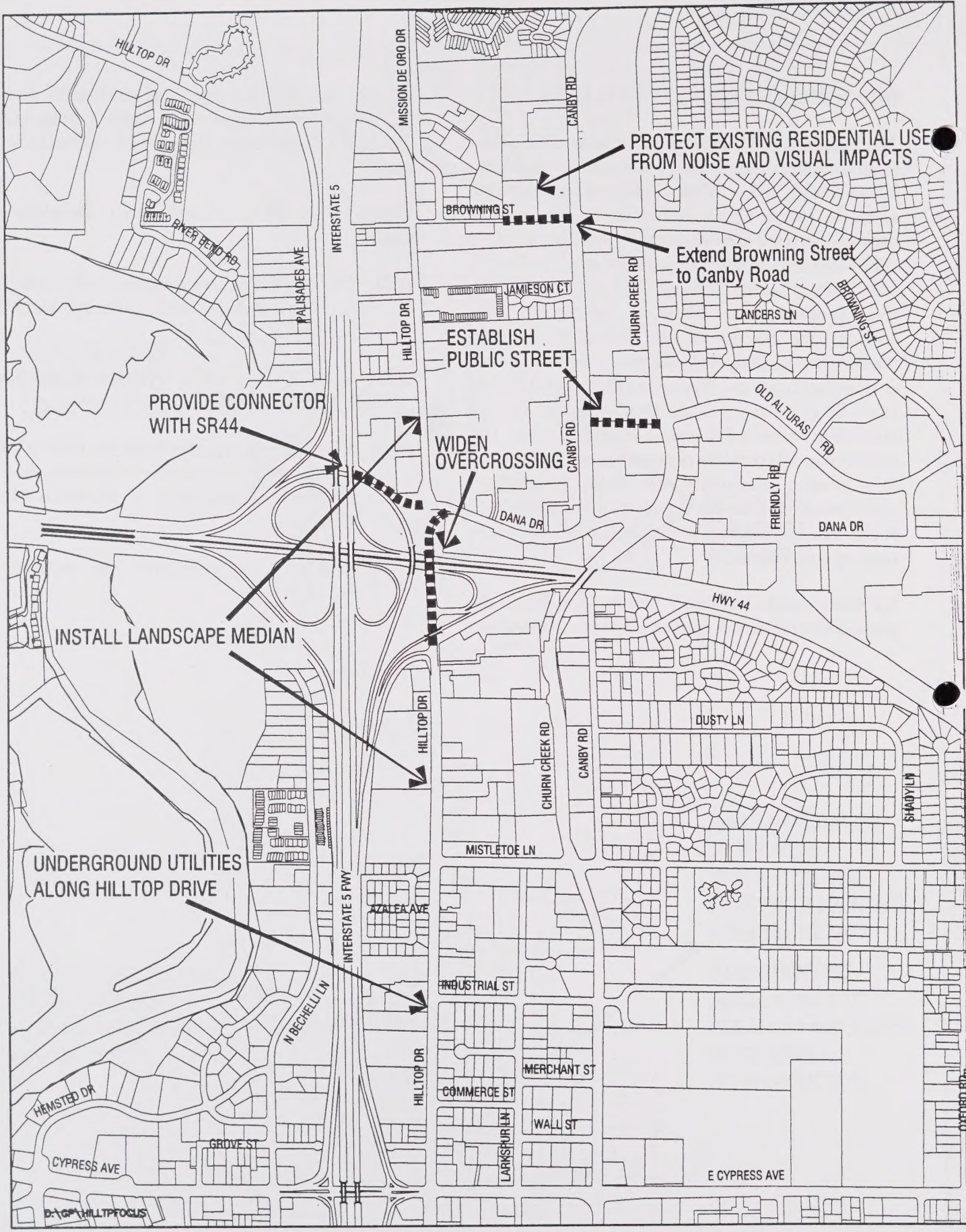


Figure 1-13 Hilltop / Dana Drive Focus Area

OASIS ROAD FOCUS AREA

Developed prior to annexation to the City, the Oasis Road Focus Area is dominated by rural residential-type parcels, most of which have only deeded easement access. Public water and sewer are available to the area, but few parcels have taken advantage of the availability of sewer service. Costs associated with providing necessary infrastructure and public roads severely hamper the ability of the area to urbanize, despite its proximity to Interstate 5 and planned future neighborhood and regional commercial facilities in the vicinity. The General Plan Diagram establishes residential parcel sizes between one and five acres in keeping with existing lot sizes. A joint City of Redding/Shasta County redevelopment project has been proposed for the area which, if approved, could facilitate infrastructure upgrades.

This General Plan explicitly discourages further subdivision of parcels in the area depicted on the Focus Area Diagram until such time as a development plan is approved for the area. The location, access, and proximity to employment centers and services suggest that this area will be appropriate for a variety of residential products and densities. Land divisions which expand the relatively low-density development pattern will foreclose significant opportunities for redevelopment over the next 20 years.

Oasis Road Focus Area Development Guidelines

O1. Prepare and adopt a specific plan for a portion of the Oasis Road focus area as shown in Figure 1-14.

O2. Provide for a system of multi-use trails along creeks within the focus area.

O3. Construct one or more regional stormwater detention basins at appropriate locations.

O4. Provide generous development setbacks from creeks.

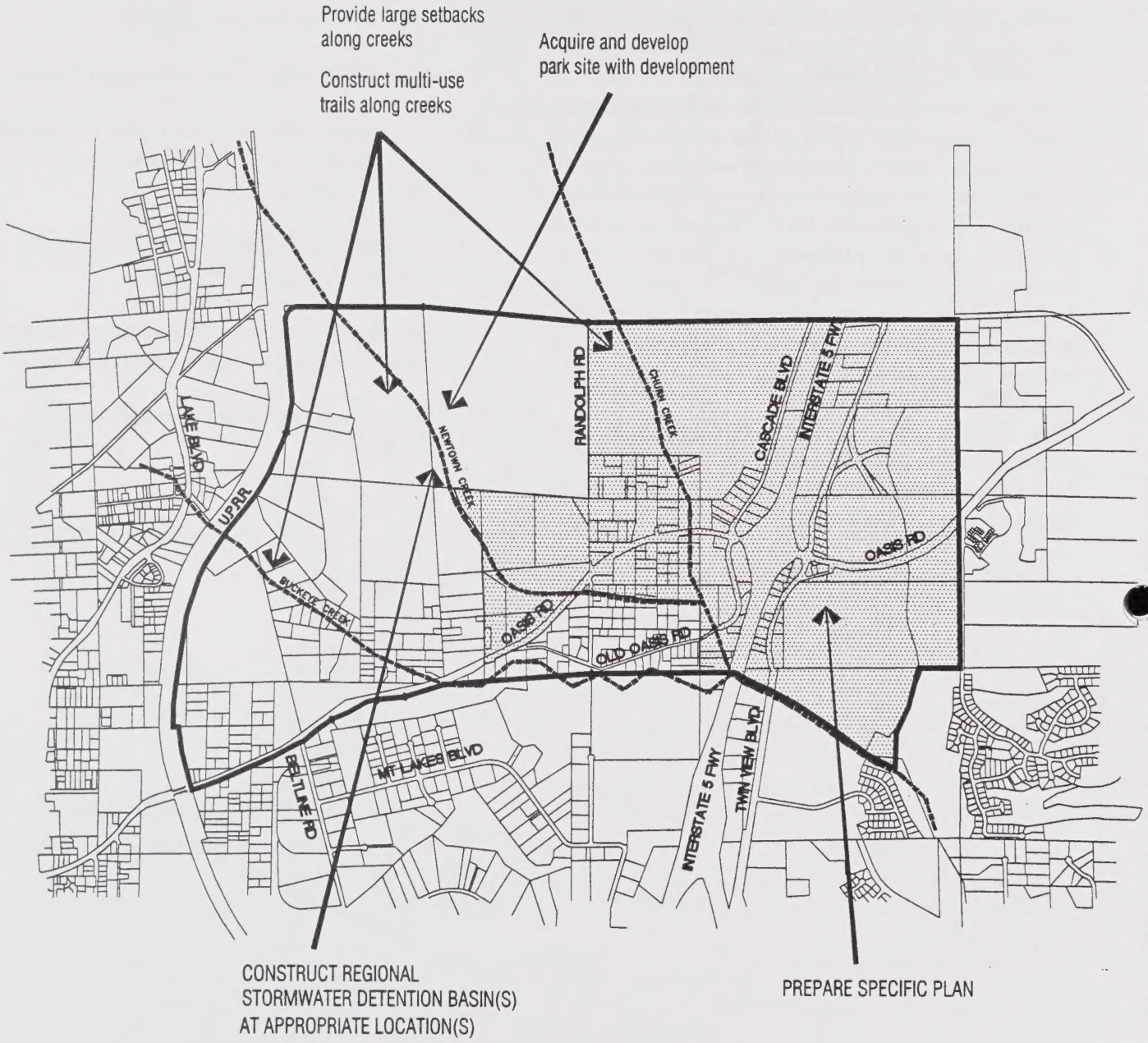


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Figure 1-14 Oasis Road Focus Area

PARKVIEW NEIGHBORHOOD FOCUS AREA

The Parkview Neighborhood is among Redding's older neighborhoods. It lies south of Cypress Avenue between the west bank of the Sacramento River and State Highway 273. Grange Street separates the primarily residential northern portion from a small industrial pocket in the south. Commercial/office uses have developed along the highway frontage and Parkview Avenue. Redding's new Civic Center complex and South City Park are located immediately across Parkview Avenue to the north.

Parkview has experienced marked deterioration over the past twenty years, declining from its heyday status in the 1950s and '60s as an attractive, middle-class family residential neighborhood to the Parkview of today where criminal activity, cheap rental property, and deteriorated infrastructure prevail.

The decline is, in part, attributable to the establishment of higher-density land uses, along with the transformation of many of the existing single-family homes into rental properties. Of the existing residential units, less than 25 percent are currently owner-occupied. Coupled with the close proximity of industrial and service commercial uses with little or no buffer zone, the quality of life within portions of the residential neighborhood is poor. Deferred maintenance and/or neglect is evident on many structures. Property values are low. Because much of the pattern of development occurred prior to establishment of current standards, many developed parcels are substandard in size, have inadequate setback from the street and neighboring properties, and have inadequate access.

The neighborhood has been the focus of Redding's Neighborhood Police Unit (NPU) for several years. While the area is showing positive trends toward alleviation of most gang- and drug-related criminal activity, the NPU is still faced with a level of calls for assistance that far exceeds other similarly-sized neighborhoods in Redding.

In December 1998, the Redding Redevelopment Agency authorized funding for the development of a revitalization plan for the Parkview Neighborhood. The emphasis of the plan will not only be on halting the deterioration process, but also on the development of a revitalization strategy for both the commercial and residential portions of the neighborhood. From a positive standpoint, the Parkview Neighborhood is uniquely located in close proximity to the new Civic Center, the Sacramento River and the Park Marina riverfront, and a major City park.

Parkview Neighborhood Area Development Guidelines

It is anticipated that the revitalization plan will establish specific development policies for the neighborhood that will accomplish the following:

PN1. Preserve and enhance the residential nature of the core area through establishment of effective buffer land uses, especially between the residential portion and the industrial/service commercial uses to the south and west and between single- and multiple-family uses, utilizing innovative design features.

PN2. Encourage neighborhood-serving retail uses and low-intensity office uses along with multiple-family uses along the frontage of Parkview Avenue.

PN3. Establish contiguous, landscaped, setback pedestrian corridors between the residential area and existing adjacent commercial, recreational, and educational facilities.

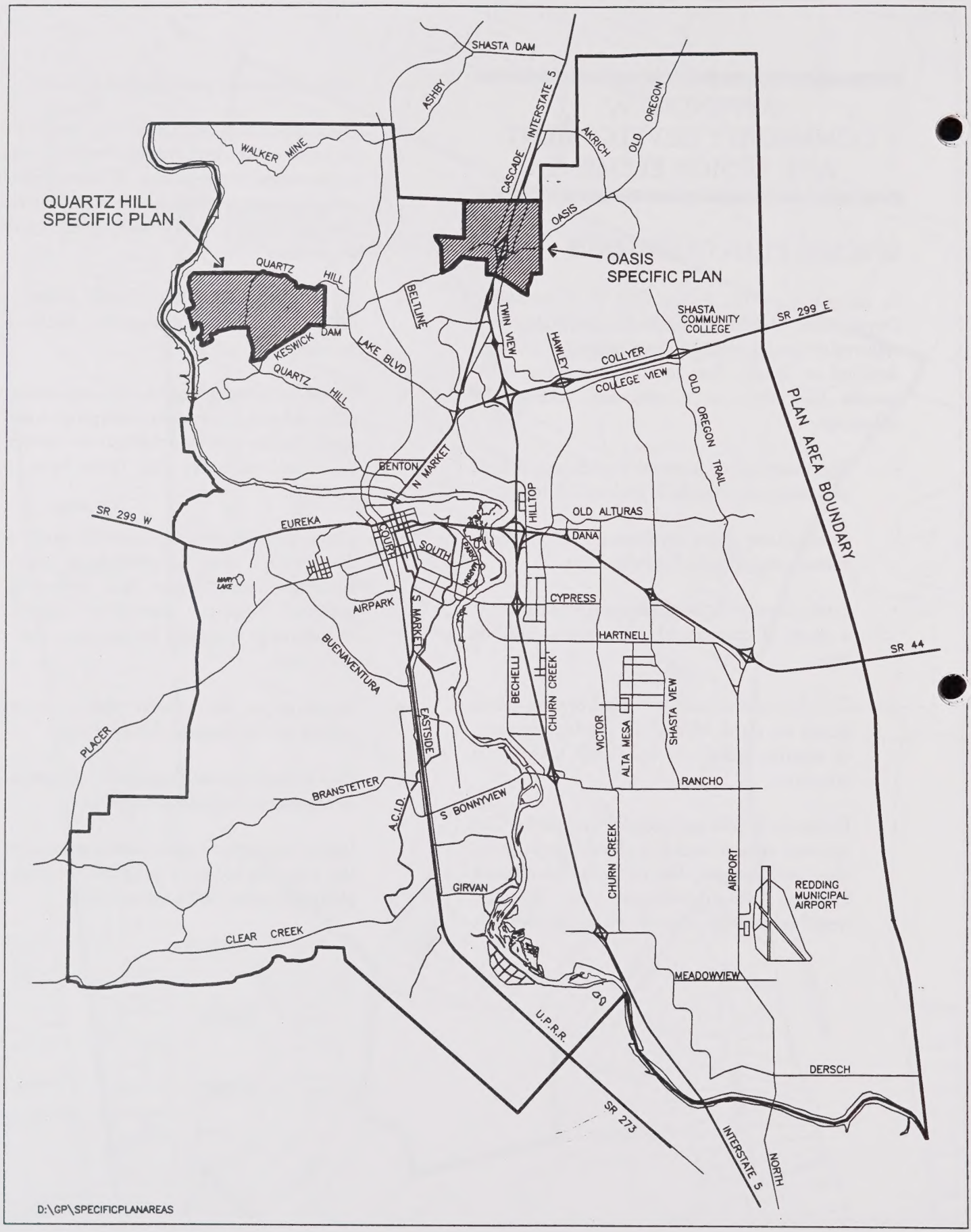
Figure 1-15 Parkview Neighborhood Focus Area

APPENDIX "A" COMMUNITY DEVELOPMENT AND DESIGN ELEMENT

SPECIFIC PLAN GUIDELINES

In accordance with Policy CDD1I (Community Development and Design Element), preparation and approval of specific plans will be required for the areas depicted as *Specific Plan* in this Appendix. The specific plan shall, at a minimum, address the following:

- The distribution, location, and extent of land uses, including standards for land use intensity.
- Compatibility of new development with adjacent existing and proposed development.
- Establishment of mixed-use areas which provide a range of commercial services and housing types.
- Distribution and location of roadways, including design standards for and the precise alignment of arterial, collector, and local streets and bikeways.
- Provisions for the extension of the existing City roadway system into new development areas. New development shall be linked to adjacent existing neighborhoods and planned neighborhoods by collector and local streets.
- Land acquisition, parcel-assembly needs.
- Distribution and location of and specifications for sewer, water, and drainage facilities needed to serve new development. Wherever possible and consistent with public safety consideration, drainage facilities should be designed as natural waterways.
- Distribution and location of parks, schools, and other public and quasi-public facilities as appropriate.
- Provisions for linking residential neighborhoods, parks, schools, Downtown, shopping areas, and employment centers through a system of pedestrian pathways and linear open-space corridors.
- Design guidelines for all new public and private development and improvements, including landscape, park layout and improvement, roadway frontage treatment, subdivision identification signs and monuments, and walls and fences.
- Provisions for development phasing to ensure orderly and contiguous development.
- Provisions for minimizing conflicts between new development and agricultural uses.
- Implementation measures necessary to carry out the plan, including a program for financing public infrastructure improvements.



Appendix A Specific Plan Areas

Transportation Element

Transportation Element

INTRODUCTION

PURPOSE AND CONTENT

A city is both defined and constrained by the network of highways, roads, trails, railroads, and transit services that move its residents and goods in, through, and out of the community. A comprehensive, well-planned, and efficiently functioning transportation system is essential to Redding's long-term growth and vitality. The Transportation Element (referred to by the Government Code as the *Circulation Element*) provides the necessary framework to guide the growth and development of the Planning Area's transportation-related infrastructure and integrates land use and transportation planning by ensuring that all existing and future developments have adequate circulation. The element is not limited to automobile-related transportation, but addresses the development of a balanced, multi-modal transportation system for the City, although the street and highway (circulation/access) system supports the movement of all transportation modes, except rail, in Redding. Recognition of the regional nature of transportation facilities that various transport modes use and the need for interagency coordination is also emphasized.

Background data and information for this element are contained within Chapter 6 of the City of Redding *General Plan Background Report*.

Specific topics addressed within the policy document include:

- Streets and Highways.
- Regional Transportation Planning.
- Neighborhood Streets.
- Pedestrianism.
- Parking.
- Bicycle System.
- Public Transportation and Facilities.
- Air Transportation and Facilities.
- Railroad Services and Facilities.

AUTHORITY

Pursuant to Government Code Section 65302(b), a general plan is required to include:

> *A Circulation Element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the plan.*

The provisions of a Transportation Element affect a community's physical, social, and economic environment and are inexorably linked with a land use element. Its provisions must also be integrated with applicable State and regional transportation plans.

The City of Redding has chosen to address utility-oriented facilities, such as energy, water, sewage, storm drainage, and communications, within a comprehensive Public Facilities and Services Element.

GOALS AND POLICIES

STREETS AND HIGHWAYS

TRAFFIC PLANNING AND LEVEL OF SERVICE

Land use planning can have a significant impact on managing local traffic problems and, to some extent, regional problems. For instance, this General Plan includes land use policies aimed at giving more residents the choice of living closer to their jobs. It also contains policies supporting mixed-use developments, higher-density development in the Downtown and other areas, and locating neighborhood shopping facilities closer to residential neighborhoods. These policies can be found in the Community Development and Design Element. But these strategies alone will not solve existing congestion problems nor will they prevent additional circulation problems from occurring in the future.

A driver's perception of traffic flow is directly related to expectations. People may expect and accept occasionally heavy traffic, but will not accept continuous delays throughout their course of travel. In Redding, most drivers have come to expect virtually free-flow traffic, unlike what they may have encountered in larger cities in which they have resided or have visited. But it is important to realize that, while all streets are designed to carry traffic, they are not all the same. Some serve major commercial corridors and are directly linked to Interstate 5 and the State highway system. Other streets function as links between places of work and residential areas. Still others provide basic organization to areas like Downtown, such as a "grid" system that have their own flavor and hence a different driving experience. It is not reasonable to expect that every street should have free-flow traffic 24 hours a day.

Traffic engineers use quantitative measures known as Level of Service (LOS) to describe traffic conditions. Factors taken into consideration include volume of traffic, street and intersection design, signal timing, and other variables. Each LOS is assigned a letter, ranging from "A" (less than a 5-second wait at intersections and no restrictions on speed along arterials) to "F" (delays of more than one green cycle at intersections and "stop and go" movement along the street). LOS is normally used to describe peak-hour conditions, the morning or afternoon hour when traffic is the heaviest. The following table describes the Level of Service categories:

Table 2-1
Level of Service Descriptions

Service Level Category	Descriptions of Traffic Conditions	
	Signalized Intersections (Average Length of Wait[1])	**Arterials** (Average Speed[2])
Free-Flowing (LOS A)	Most vehicles do not have to stop. On the average, each driver waits less than 5 seconds to get through intersection.	Vehicles can maneuver completely unimpeded and without restrictions on speed caused by other cars and delays at intersections. *Cypress Avenue at 7 a.m. on a Sunday.*
Minimal Delays (LOS B)	Some vehicles have to stop, although waits are not bothersome. Average wait at intersection is 5 to 15 seconds.	Drivers feel somewhat restricted within traffic stream and slightly delayed at intersections. *Hilltop Drive at 10 a.m. on a weekday.*
Acceptable Delays (LOS C)	Significant number of vehicles have to stop because of steady, high traffic volume. Still, many pass through without stopping. On the average, vehicles have to wait 15 to 25 seconds to get through intersection. *Typical LOS at major intersections during mid-day.*	Traffic still stable, but drivers may feel restricted in their ability to change lanes. They begin to feel the tension of traffic. Delays at intersections contribute to lower average speeds. *Cypress Avenue at 11 a.m. most weekdays.*
Tolerable Delays (LOS D)	Many vehicles have to stop. Drivers are aware of heavier traffic. Cars may have to wait through more than one red light. Queues begin to form, often on more than one approach. On the average, vehicle wait is 25 to 40 seconds. *Common afternoon peak-hour LOS at many intersections.*	High traffic volumes and delays at intersections reduce average travel speeds somewhat compared to free-flow. Drivers aware of slower pace of traffic. *Cypress Avenue at noon—most intersections.*
Significant Delays (LOS E)	Cars may have to wait through more than one red light. Long queues form, sometimes on several approaches. Average waits of 40 to 60 seconds. *Apparent at major arterial intersections at peak hour.*	High traffic volume and many signalized intersections with long queues reduce average travel speed to one-third of free-flow. *Cypress Avenue at 5 p.m. at Bechelli Lane.*
Excessive Delays (LOS F)	*Intersection is jammed.* Many cars have to wait through more than one red light or more than 60 seconds. Traffic may back up into "upstream" intersections. Generally caused by obstruction or irregular occurrence (e.g., signal preemption for a train). This condition often viewed as "gridlock."	Travel is "stop and go"—one-third or one-fourth of free-flow. Usually caused by a "downstream" obstruction, such as lanes reduced from 4 to 3 or a stalled car or signal preemption for a train. *At times, Cypress Avenue experiences LOS "F" at the freeway interchange area and when the Cypress Bridge over the Sacramento River is closed to only one lane in a single direction (due to accidents or other problems).*

[1] "Average wait" is a measure of traffic conditions at intersections. It is an estimate of the average delay for all vehicles entering the intersection in a defined period of time, for example, the evening peak hour. It is expressed as a range rather than a single value. Some drivers will actually wait more or less time than indicated by the range.

[2] "Average speed" is a measure of traffic conditions on arterials. "Average speed" is based on the total time it takes to travel a certain distance, including the time spent waiting at intersections. It is determined more by traffic volume and conditions at intersections than by the legal speed limit.

Quantitative measures of LOS are useful aids to understanding the community and helping to identify potential problems with street design and land use impacts. However, LOS is theoretical in nature and must be tempered by judgment and interpretation. For instance, minor adjustments in signal timing, turning-lane provisions, points of access from adjoining properties, and other modifications can improve the actual operation of a given street or intersection. Further, LOS describes the conditions based on a "peak hour," usually corresponding to the morning or afternoon commute. Intersections may be impacted for shorter periods of time without affecting the LOS rating.

This General Plan uses a multi-level approach to assigning LOS expectations. It recognizes that the same level of service for all streets is not appropriate or necessary. For example, moving traffic through Downtown without delay detracts from efforts to establish an active, pedestrian-friendly area. A different level of service is also appropriate at freeway interchanges and certain principal arterial streets as indicated on Figure 2-1.

GOAL T1

COORDINATE TRANSPORTATION AND LAND USE PLANNING; PROTECT EXISTING AND PLANNED LAND USES FROM TRANSPORTATION-RELATED CONFLICTS; PROMOTE MULTI-MODAL TRANSPORTATION OPTIONS.

Policies to achieve this goal are to:

T1A. Establish the following peak-hour LOS standards for transportation planning and project review. They reflect the special circumstances of various areas of the community, as depicted in Figure 2-1:

- Use LOS "C"—"acceptable delays"—for most arterial streets and their intersections.
- Use LOS "D"—"tolerable delays"—for the Downtown area where vitality, activity, and pedestrian and transit use are primary goals.
- Use LOS "D"—"tolerable delays"—for streets within the State highway system and interchanges.
- Use LOS "D"—"tolerable delays"—for river-crossing street corridors whose capacity is affected by adjacent intersections.

T1B. Require development projects to construct both on- and off-site improvements as necessary to mitigate the effects of increased traffic generated by the project and maintain peak-hour LOS standards established by Policy T1A. The traffic analysis used to establish mitigating measures shall be based on the City's Traffic Model or other City-approved method. Improvements may be deferred by the City upon approval of a Deferred Improvement Plan which identifies improvements needed, costs, funding sources, and other pertinent data required by the City.

T1C. Obtain needed street right-of-way dedications with ministerial projects and with the approval of subdivisions, use permits, and other discretionary actions.

T1D. Encourage employers to provide incentives for employees utilizing alternatives to the single-occupant automobile, such as car pools, van pools, buses, bicycling, and walking.

T1E. Encourage employers, including government agencies, to allow telecommuting and flex time and to promote staggered shifts or base work hours that do not coincide with peak-period traffic to reduce peak-hour trips.

T1F. Route through truck traffic around existing and future residential neighborhoods and incompatible commercial areas to the extent feasible.

T1G. Continue to utilize signage and enforcement to clearly demonstrate the City's intent to reduce truck traffic and parking in residential districts.

GOAL T2

USE TRANSPORTATION SYSTEMS TO REINFORCE THE URBAN LAND USE PATTERN OF DOWNTOWN.

Policies to achieve this goal are to:

T2A. Retain alleys in the Downtown area to provide pedestrian circulation and convenient service access to local businesses.

T2B. Establish motorized and/or nonmotorized transportation linkages to connect Downtown Redding to the Park Marina, Turtle Bay, and Civic Center areas; augment the transit system to establish frequent and convenient access to these destination areas.

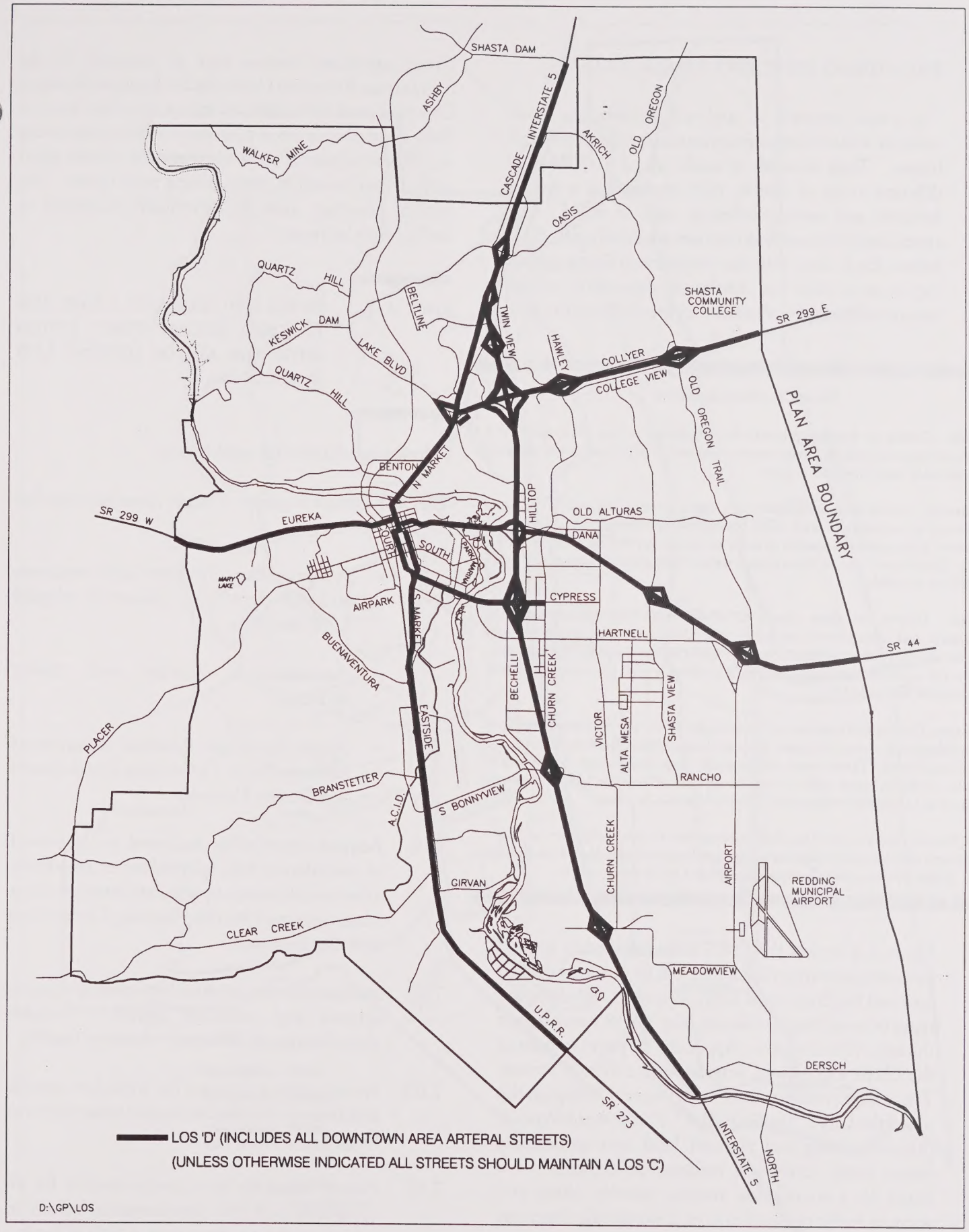


Figure 2-1 Peak Hour Level Of Service

N
W E

October 3, 2000

PROVIDING EFFICIENT ROAD SYSTEMS

The street network is, and will remain, the basic element of the transportation system for the foreseeable future. That network is made up of a number of different types of streets, each performing a special function and serving different types of traffic. The street classifications Redding uses are listed in the table below. Each class, with the exception of Freeways and Expressways, also has subclasses, depending on the nature and quantity of traffic they are designed to carry.

Street Classification System

Freeways. Drivers use freeways primarily for long-distance trips. Cars can enter a freeway only at an interchange; major streets cross only at underpasses or overpasses. These facilities range from 4 to 6 lanes.

Expressways. Drivers also use expressways for regional trips. Other roads may cross expressways at intersections with traffic signals, or they may have underpasses or overpasses. It is usually not possible to enter an expressway from an adjacent parcel of land. These 4- to 6-lane facilities require right-of-way generally between 110 feet and 150 feet in width.

Arterial. Drivers use these streets to travel to activity centers, freeways, expressways, and other arterials and collectors. Driveways may connect adjacent land uses directly; collector streets conduct traffic to the arterials. Right-of-ways necessary to accommodate traffic projected for these 4- to 6-lane streets generally range from 84 feet to 135 feet.

Collectors. Drivers use these streets to travel within and between residential areas and neighborhood commercial areas. Access to adjacent land uses may be restricted in residential areas. These streets collect traffic from local streets and route it to arterials. Collector street right-of-ways range from 60 feet for 2-lane residential collectors to 125 feet for 4-lane facilities.

Local Streets. Drivers travel on these streets only to reach adjacent land uses. Local streets serving residential areas are designed to protect residents from through traffic. Right-of-ways generally range from 28 feet to 60 feet in width.

Figure 2-2 depicts the City's basic circulation system, including new street links that will be needed between now and buildout of the City. Appendix "A" notes the types of street improvements that will be needed over the next 40 to 50 years. Appendix "B" provides a list of the City's expressway, arterial, and collector streets. These improvements have been projected through the use of the City's "Traffic Model." This computer model utilizes existing and planned land uses to estimate future traffic levels and roadway deficiencies. It is based on a countywide system, thereby taking into account traffic originating from areas outside the city as well as those generated from within.

Given significant barriers such as Interstate 5, the Sacramento River, the Union Pacific Railroad, Redding Cemetery, and often difficult topography, Redding has done an admirable job of planning for and constructing an efficient system of cross-town arterial streets. Most traffic flows smoothly, even during peak hours. The system, however, must be continually enhanced as traffic levels increase.

GOAL T3

BUILD AND MAINTAIN A SAFE AND EFFICIENT LOCAL STREET SYSTEM WITH THE AIM OF MEETING LOS STANDARDS.

Policies to achieve this goal are to:

T3A. Establish a system of street cross-sections that will:

- Accommodate all improvements necessary to handle forecasted volumes at adopted LOS standards.
- Accommodate bicycles and transit facilities.
- Attain the design objectives for streets as addressed in the Community Development and Design Element.

T3B. Require streets to be dedicated and improved in accordance with adopted street standards; allow modifications to standard street sections when approved by the Planning Commission and City Engineer.

T3C. Maximize intersection and driveway spacing on arterial and collector streets. Require shared/common driveways wherever feasible.

T3D. Provide right-turn lanes for arterial-to-arterial and arterial-to-collector intersections wherever feasible.

T3E. Pursue financing in a timely manner for all components of the transportation system to achieve and maintain adopted level of service standards.

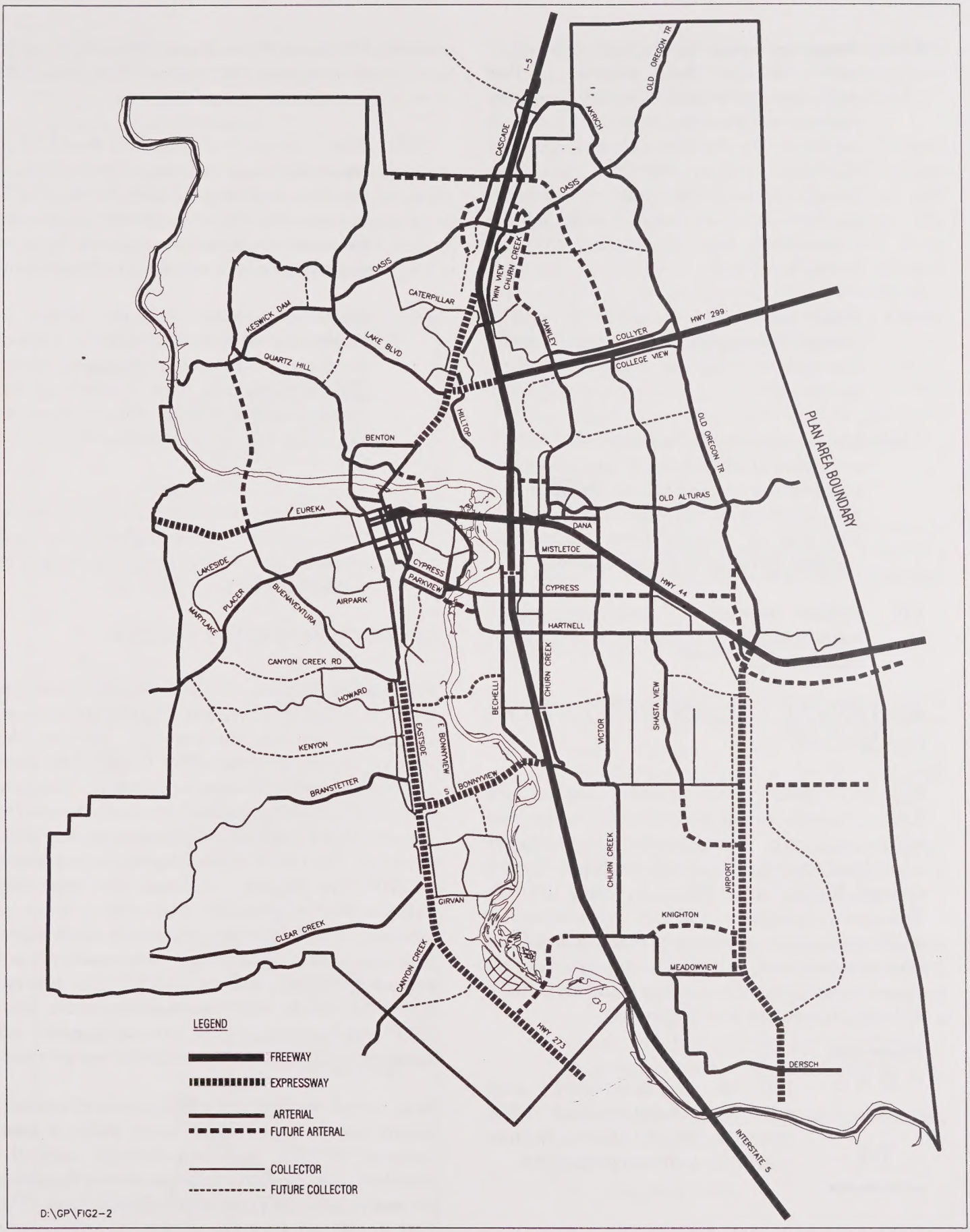


Figure 2-2 Circulation Plan

N
W E
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October 1, 2000

T3F. Assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system. Exceptions may be when new development generates significant public benefits (e.g., low-income housing, primary-wage-earner employment), and alternative sources of funding for the improvements can be obtained to offset foregone revenues.

T3G. Utilize intelligent transportation control systems, where appropriate, to improve traffic flow and safety on the street and highway system.

T3H. Utilize information in Appendices "A" and "B" and Figure 2-2 in addition to any information obtained from project-specific traffic studies when determining right-of-way needs and the type/level of improvements required to maintain and upgrade the street system.

T3I. Require assurance of long-term, private maintenance for all private streets constructed within the City.

REGIONAL TRANSPORTATION PLANNING

Regional planning is a key element in dealing with traffic congestion and air pollution that results from vehicle commuting. To address regional transportation issues, Redding works closely with the Shasta County Regional Transportation Planning Agency (RTPA). This agency coordinates local land use planning and establishes capital improvement programs under a State referendum approved in 1990. The agency is made up of representatives from Shasta County and the Cities of Redding, Shasta Lake, and Anderson.

GOAL T4

ENSURE INTERAGENCY AND REGIONAL COORDINATION WITH REGARD TO TRANSPORTATION PLANNING AND IMPROVEMENTS.

Policies to achieve this goal are to:

T4A. Participate in multi-jurisdictional efforts to plan, upgrade, and expand the regional road network.

T4B. Work closely with Caltrans and the RTPA to ensure that State facilities which go through the City—including SR 299, SR 44, SR 273, Interstate 5, and intersections/interchanges that involve those facilities—are maintained at an acceptable LOS as defined in this element.

T4C. Encourage Caltrans and the RTPA to incorporate desired City design features (Intelligent Transportation System programs, landscaped medians, Class II bike lanes, and detached sidewalks) within State facilities that function as arterials and gateways through the City.

T4D. Work closely with Shasta County to ensure that adequate street rights-of-way and improvements are provided in areas likely to annex to the City.

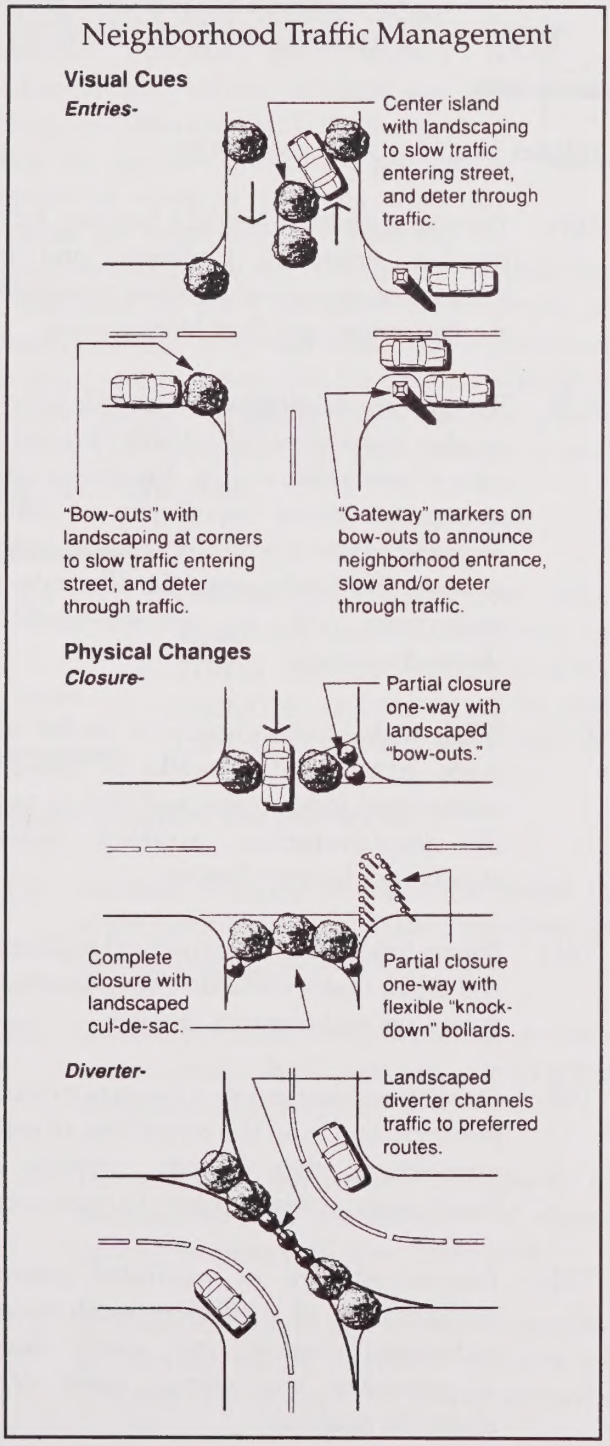
NEIGHBORHOOD STREETS

Maintaining adequate traffic flows and acceptable levels of service is of primary concern on freeways, expressways, arterials, and collectors. However, the focus on residential streets is often to slow traffic down and create more livable street environments. Capacity thresholds for residential streets are usually designed to ensure that traffic flows remain within acceptable levels of service. The typical threshold given for local streets is 3,000 trips per day. Although this figure may indicate what is generally acceptable in terms of vehicular levels of service, it is actually much higher than the traffic volumes that most residents and pedestrians would find acceptable. In general, residential streets that accommodate more than 2,000 trips per day are viewed as unsafe, noisy, and disruptive to the quality of a residential environment.

Even though Redding has a good system of arterials, drivers may be prompted by heavy traffic at some locations to take short-cuts through residential neighborhoods. Excessive traffic can destroy the feeling of comfort, safety, and cohesion in neighborhoods. The City should use a variety of physical and program options to divert traffic in problem areas. The size and kind of problem should be verified by a special traffic

study prior to carrying out any options. Careful review of proposed street designs (including street patterns and widths) in new subdivisions is also important to avoid the creation of new problems.

The speed vehicles travel in residential neighborhoods is a very real concern. Although residential streets are "designed" for a speed of 25 MPH, the average speed along the City's residential streets is in excess of 30 MPH. On certain streets, the average speed is considerably higher. Excessive speed not only poses serious pedestrian safety concerns, it also detracts from the general quality of life within the neighborhood.



Speed can be controlled through a number of means, including increased enforcement; traffic-calming devices, such as roundabouts and neck-downs; and narrowing the "pavement width" of the street. The latter two can work together when designed as an integral component of new neighborhoods as addressed in the Community Development and Design Element. Where problems occur on existing streets, the same types of techniques can be used to "retrofit" the street, thereby slowing vehicle speed. Speed bumps, street closures, and diversions should be used only as a last resort. These devices may cause longer response times for emergency vehicles and reduce access options.

GOAL T5

PROTECT RESIDENTIAL NEIGHBORHOODS FROM EXCESSIVE THROUGH TRAFFIC, WHERE FEASIBLE.

Policies to achieve this goal are to:

T5A. Develop neighborhood protection plans when traffic studies or monitoring confirm excessive traffic volumes, substantial through traffic, speeding, or accidents in specific residential areas.

T5B. Emphasize the use of landscape and other visual deterrents to through traffic; install physical obstacles only as a last resort.

T5C. Establish street design standards and review criteria intended to avoid the creation of local streets that will encourage excessive speed and/or which will ultimately function as collectors. Factors that may contribute to a local street functioning as a collector include:

- Excessive length (typically greater than one-half mile).
- Excessive width.
- The lack of other streets which may be used to convey traffic to nearby arterials.

T5D. Encourage new neighborhoods to incorporate detached sidewalks and to establish landscape "parkways" between the curb and sidewalk. Continuous and consistent tree-planting to form canopy closure is encouraged.

T5E. Route through traffic around the perimeters of neighborhoods where possible.

PEDESTRIANISM

The popularity of walking is continuing to increase. Not only does walking provide a good form of exercise, it can also be an effective "commuting" mode if complementary land uses are located nearby. In the past, the realm of the pedestrian has often been overlooked in Redding. In order to be effective, sidewalks and other pedestrian areas need to be reasonably attractive, impart a feeling of safety and separation from vehicles, and be designed for use by all individuals, including those with mobility impairments. These objectives can largely be achieved through facility design. Factors such as sidewalk width and the creation of an attractive separation between the sidewalk and the curb (usually by a maintained landscape strip) can contribute to the quality and perceived safety of the pedestrian's experience. This is particularly important on streets which carry heavy traffic volumes and/or have relatively high vehicle speeds.

Sidewalks are particularly critical in areas where young children are likely to walk. This would include corridors between residential areas and parks or schools. The installation of handicapped ramps in accordance with Americans with Disabilities Act requirements is also important at intersections, so that those with mobility impairments can easily cross the street and safely return to a sidewalk system. In order to encourage the highest level of use, pedestrian facilities need to be linked or connected to areas or destination points that people want to get to. These include, but are not limited to: a neighborhood store, place of employment, neighboring development, educational/recreational facilities, the river, or other creekside trail. Policies addressing this issue are included in the Community Development and Design Element.

When walking is not perceived as safe, convenient, or comfortable, it is not selected as the mode of travel by those who have a choice. Development of the type of pedestrian system described in this section is essential to increasing the number of individuals choosing to walk through the Redding community. The Recreation Element also addresses the establishment of a comprehensive trail system that will complement the City's sidewalk system.

GOAL

T6

PROVIDE AN ATTRACTIVE, SAFE, AND CONTINUOUS SYSTEM OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES.

Policies to achieve this goal are to:

T6A. Provide pedestrian-oriented features, such as benches, enhanced landscape, and trash receptacles, in commercial areas, particularly in the Downtown and Park Marina areas.

T6B. Require new development to provide sidewalks or other pedestrian-dedicated facilities on both sides of new public streets. Exceptions may be appropriate where topography is difficult, proposed lots are of a rural or semi-rural nature, or where the development plan illustrates that pedestrians will be accommodated by alternative means.

T6C. Work with neighborhoods to decide where curbs, gutters, and sidewalks are needed on unimproved local streets and how to pay for the improvements; establish sidewalk continuity wherever feasible.

T6D. Pursue funding for the continued replacement and repair of sidewalks that have deteriorated due to age and tree-root invasion.

T6E. Develop and implement a program to identify, prioritize, and fund the retrofitting of existing intersections that do not currently have handicapped access ramps at the street corners.

T6F. Require all new or renovated pedestrian facilities to be of a sufficient width to ensure pedestrian comfort and safety and to accommodate the special needs of the physically disabled.

T6G. Restrict speed limits in residential neighborhoods, Downtown, and other areas of the City where pedestrian activities are strongly encouraged to reduce the potential for pedestrian injuries and fatalities.

PARKING

Parking facilities are an important part of the transportation system. Allowing on-street parking along busy arterial streets, for instance, increases the possibility of pedestrian and vehicle conflicts and can disrupt the flow of traffic. Off-street parking often has its own drawbacks, particularly related to conflicts resulting from the number and location of driveways and the appearance they have from the street. The latter issue is addressed in the Community Development and Design Element. In certain areas, such as Downtown, on-street parking is desirable, the conflicts noted above notwithstanding. Traffic generally moves at a slower speed in the Downtown area and maintains a small-town feel to the streets.

GOAL **T7** ENSURE THAT SUFFICIENT, WELL-DESIGNED, AND CONVENIENT ON-STREET AND OFF-STREET PARKING FACILITIES ARE PROVIDED TO SERVE LAND USES THROUGHOUT THE CITY.

Policies to achieve this goal are to:

T7A. Maintain adequate on-street and public off-street parking areas within the Downtown area to meet ongoing parking demands.

T7B. Generally prohibit on-street parking on arterial streets outside the Downtown area to reduce congestion and conflicts.

T7C. Pursue funding options and strategies for the construction and maintenance of shared-parking facilities/structures Downtown.

T7D. Establish maximum and minimum standards for parking spaces in transit corridors and Downtown to promote use of alternate modes.

Table 2-1
Bikeway Classifications

Bikeway Classification	Description of Facility
Class I	Paths developed within an entirely separate right-of-way for the exclusive use of bicycles and pedestrians. Except for occasional cross-flow points, these facilities completely separate cyclists from motorists.
Class II	Lanes within the road right-of-way designated specifically for one-way bicycle use. Class II facilities are delineated by signs and striping along street shoulders.
Class III	Bicycle routes indicated only by posted signs on existing streets. No specific bicycle lane is delineated.

BICYCLE SYSTEM

Bicycles can be an integral part of a city's transportation system. As lifestyles and land use patterns continue to change, there is every reason to expect that this transportation mode will increase considerably. To make the most of commuter bicycle use, a comprehensive system of bikeways needs to be established. There are many opportunities within Redding's existing arterial and collector street system to establish a viable commuter system. In many instances, this system can be linked to the system of multi-use trails that have been and will be constructed along the river, its tributary streams, and other areas. It will take commitment on the part of the City to ensure that proper facilities are provided as new streets are constructed and to establish an active program to retrofit existing streets to accommodate bike facilities. This work may consist of restriping streets to provide adequate width for bike facilities and/or providing additional paved width along shoulders. The preparation of a properly documented Bikeway Plan is necessary to identify existing deficiencies, recommend upgrades, and establish timing and funding priorities.

Until a Comprehensive Bikeway Plan is adopted, Figure 2-3 should be used to plan for a well-integrated bikeway system. The system should include all classes of facilities as addressed in Table 2-1.

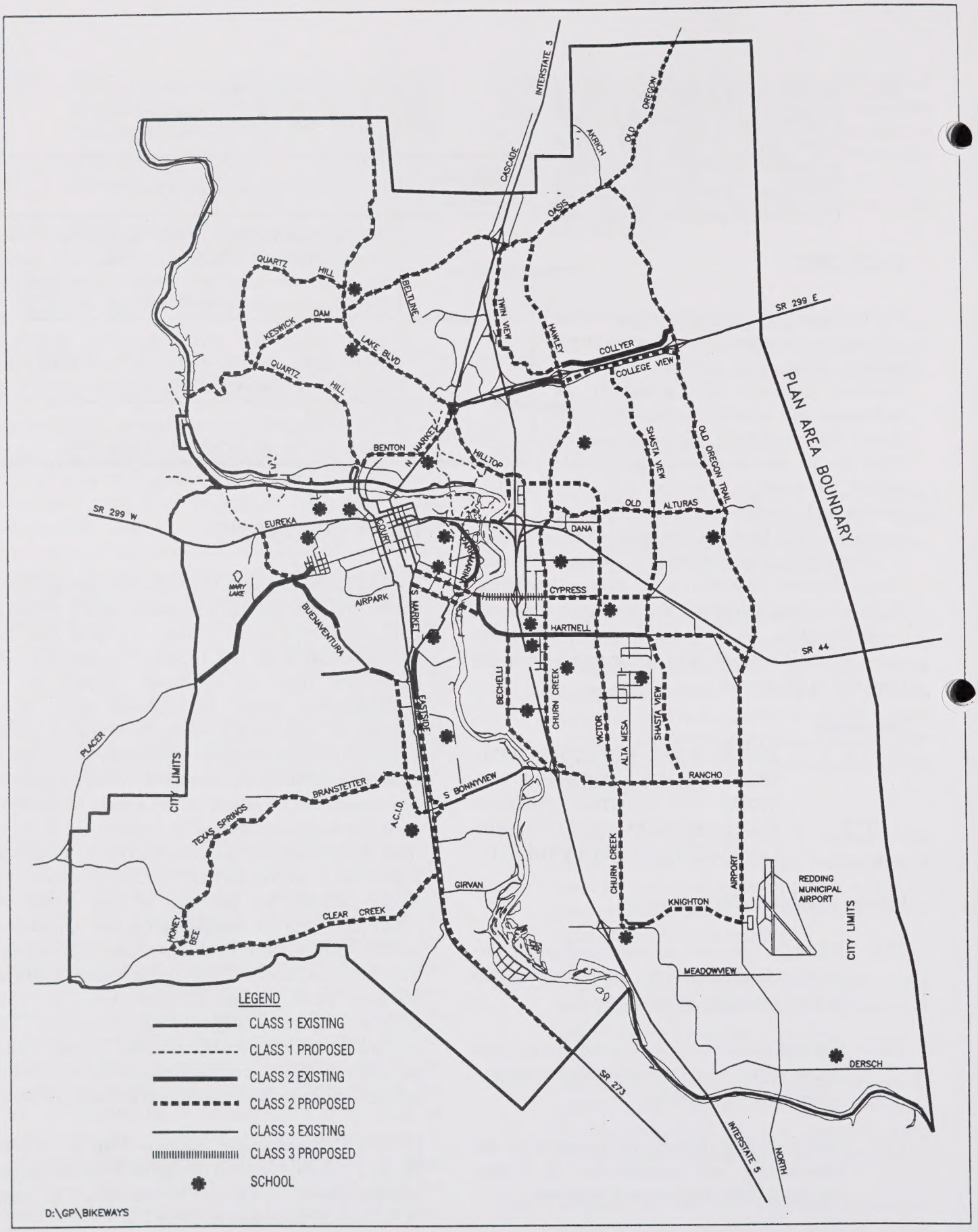


Figure 2-3 Bikeway System

GOAL

T8

MAKE IT EASIER AND SAFER FOR PEOPLE TO TRAVEL BY BICYCLE.

Policies to achieve this goal are to:

T8A. Develop and maintain a Comprehensive Bikeway Plan geared to establishing an integrated bicycle system.

T8B. Incorporate facilities suitable for bicycle use in the design of interchanges, intersections, and other street-improvement/maintenance projects.

T8C. Make improvements to streets, signs, and traffic signals as needed to improve bicycle travel.

T8D. Keep bikeways free of overhanging shrubbery, debris, and other obstacles.

T8E. Install bicycle parking in the Downtown area and at City parks, civic buildings, and other community centers.

T8F. Support the efforts of the Redding Area Bus Authority (RABA) to provide bicycle racks on all buses within the system.

T8G. Require new development to provide bicycle facilities or pay in-lieu fees based on the fair share of that development's impacts on the bikeway system and needs identified on the Comprehensive Bikeway Plan.

PUBLIC TRANSPORTATION AND FACILITIES

Public transportation, particularly bus service, is essential to the circulation system. It is often the only means of transport for people who cannot or choose not to drive, including school children, the elderly, and disabled persons. In conjunction with fundamental land use changes that provide adequate densities to ensure the feasibility of transit, the availability of a quality public transportation system can help reduce residents' dependence on the automobile. Coordination between transit and air transportation services can also enhance the transportation options available to residents and visitors.

GOAL

T9

PROMOTE AND MAINTAIN A PUBLIC TRANSIT SYSTEM THAT IS SAFE, EFFICIENT, COST-EFFECTIVE, AND RESPONSIVE TO THE NEEDS OF RESIDENTS.

Policies to achieve this goal are to:

T9A. Support the continuation and expansion of private commercial bus operations to provide additional regional transit opportunities for residents.

T9B. Work with the Redding Area Bus Authority (RABA) on an ongoing basis to plan and implement additional transit services that are timely, cost-effective, responsive to growth patterns, and meet the needs of existing and future transit demand.

T9C. Provide bus pull-outs along arterial streets at approximately ¼-mile intervals or as indicated in the Shasta County Transit Development Plan. Determine the precise locations during development plan review or at the time of major street improvement or reconstruction.

T9D. Require development to install passenger amenities at designated bus stops when identified as a mitigating measure.

T9E. Provide attractive, well-lighted, comfortable, and protected waiting areas for bus passengers.

T9F. Promote coordination of transit and air transportation services to enhance the transportation options available for residents and visitors to the Redding community.

AIR TRANSPORTATION AND FACILITIES

Redding's two airports—Redding Municipal and Benton Airpark—provide the community with transportation options which not all cities have. Not only do these facilities provide a base for corporate, recreational, and emergency-response aircraft, they also

play a key role in serving the commercial aviation needs of businesses and the traveling public. It is important that the community support activities to maintain and expand these facilities as needed in conjunction with the City's growth.

GOAL T10 PRESERVE AND ENHANCE THE AIR TRANSPORTATION OPPORTUNITIES PROVIDED BY THE REDDING MUNICIPAL AIRPORT AND BENTON AIRPARK, WHILE PROTECTING THE PUBLIC FROM AIRPORT-RELATED NOISE AND SAFETY HAZARDS.

Policies to achieve this goal are to:

T10A. Continue to plan and develop the Redding Municipal Airport to maximize its contributions to business efficiency, economic development, and recreational opportunities within the region.

T10B. Encourage the establishment of additional commercial airline providers at the Redding Municipal Airport to provide the widest range of aviation travel choices to residents and businesses within the region.

T10C. Support Benton Airpark as a public-use, general aviation airport and commercial-reliever facility for the Redding Municipal Airport.

T10D. Protect existing and planned local air transportation facilities from encroachment by potentially incompatible land uses and require developers to file an avigation easement with the City if a proposed development or expansion of an existing use is located in the area subject to the overlay district.

RAIL SERVICES AND FACILITIES

Redding is bisected by the Union Pacific railroad in a north-south direction. The railroad provides valuable opportunities for rail transit from several industrial areas and also serves passengers to a somewhat limited extent.

GOAL T11 ENCOURAGE MAXIMUM AVAILABILITY AND USE OF BOTH FREIGHT AND PASSENGER RAIL SERVICE.

Policies to achieve this goal are to:

T11A. Support efforts to establish convenient rail transit service between Redding and the Sacramento area.

T11B. Encourage the Union Pacific Railroad (UPRR) and Amtrak to increase passenger service by expanding rail schedules to include a greater number of stops and range of connection times and by providing safe and comfortable station facilities.

T11C. Protect existing rail alignments and facilities through zoning from encroachment by potentially incompatible land uses.

T11D. Work with UPRR to identify any surplus right-of-way that may be suitable for parking or other facilities associated with a future light-rail system.

T11E. Seek the cooperation of UPRR in establishing a rail-side facility for freight-container unloading to augment goods-transportation opportunities.

GOAL T12 IMPROVE SAFETY AT LOCATIONS WHERE RAIL AND OTHER TRANSPORTATION FACILITIES INTERFACE.

Policy to achieve this goal is to:

T12A. Provide for additional grade-separated railroad crossings at South Bonnyview Road and in the Downtown area.

APPENDIX "A"
TRANSPORTATION ELEMENT

FUTURE ROADWAY NETWORK		
Roadway	Location	Improvements
New Roadway Extensions		
Auditorium Drive	Convention Center to North Market Street	2-lane collector
Bodenhamer Drive	Churn Creek Road to College View Drive	2-lane collector New Salt Creek Bridge
Browning Street	Churn Creek Road to Hilltop Drive	4-lane arterial
Buenaventura Boulevard	Eureka Way to Keswick Dam Road	2-lane collector
Canyon Creek Road	Blazingwood Drive to Placer Road	2-lane collector
Cedars Road	El Reno Lane to Buenaventura Boulevard	4-lane arterial
Churn Creek Road	Collyer Drive to Oasis Road	2-lane arterial
Creekside Drive	Sacramento Street to Bonnyview Road	2-lane collector
Dana Drive Ramp	Hilltop Drive to SR 299 WB Ramp	Freeway - 1-lane ramp
Eastside Road	Ellis Street to Parkview Avenue	2-lane collector
George Drive	North terminus to Oasis Road	2-lane collector
Hilltop Drive	E. Lake Boulevard to Twin View Boulevard	2-lane arterial
Industrial Street	Bechelli Lane to Hilltop Drive	New - 2-lane overcrossing[1]
Kenyon Drive	West terminus to Placer Road	2-lane collector
Knighton Road	Churn Creek Road to Airport Road	4-lane arterial New Churn Creek Bridge
Knighton Road	I-5 to SR273	2-lane collector
Loma Vista Drive	Churn Creek Road to Victor Avenue	2-lane collector
Old Oregon Trail	Old 44 Drive to Viking Way	4-lane arterial
Palacio Drive	Churn Creek Road to Old Oregon Trail	2-lane collector
Parkview Avenue	Freebridge Street - Hartnell Avenue	New bridge - 2-lane arterial
Pine Grove Avenue	Cascade Boulevard to Ashby Road	4-lane arterial
Santa Rosa Avenue	Quartz Hill Road to Lake Boulevard	2-lane collector

FUTURE ROADWAY NETWORK		
Roadway	**Location**	**Improvements**
Shasta View Drive	Collyer Drive to Gold Hills Drive	4-lane arterial
Shasta View Drive	Collyer Drive to north City limits	4-lane arterial
Shasta View Drive	Rancho Road to Airport Road	4-lane arterial
Shasta View Drive	Saturn Skyway Street to Galaxy Way	4-lane arterial
Tarmac Road	Abernathy Avenue to Old Oregon Trail	2-lane collector
Unnamed	Akrich Road to Pine Grove Avenue	2-lane collector
Unnamed	Churn Creek Road to Old Oregon Trail	2-lane collector
Unnamed	Eastside Road to Bechelli Lane	2-lane collector
Unnamed	Keswick Dam Road to Quartz Hill Road	2-lane collector
Unnamed	Southeast Municipal Airport Service Road	2-lane collector
Venus	Shasta View Drive to Airport Road	2-lane collector
Roadway Widening		
Airport Road	Old 44 Drive to Dersh Road	4-lane expressway
Churn Creek Road	Old Alturas Road to College View Drive	4-lane expressway
Churn Creek Road	Arizona Street to S. Bonnyview Road	4-lane arterial
Cypress Avenue	SR 273 to Hartnell Avenue	6-lane arterial/widen bridge
Hartnell Avenue	Victor Avenue to Shasta View Drive	4-lane arterial/widen bridge
Hilltop Drive	E. Lake Boulevard to E. Palisades Avenue	4-lane arterial/widen bridge
Hilltop Drive	SR 44 ramp to Dana Drive	Left- and right-turn lane Widen freeway overcrossing
Interstate 5	Knighton Road to E. Lake Boulevard	6-lane freeway
Lake Boulevard	North Point Drive to Hilltop Drive	6-lane arterial at approach to Market Street and Hilltop Drive
North Market Street	Trinity Street to Benton Drive	6-lane arterial
Oasis Road	Twin View Boulevard to Gold Hills Drive	4-lane arterial/widen bridge
Old Alturas Road	Bradford Avenue to Victor Avenue	4-lane arterial
Placer Street	Airpark Drive to Cumberland Drive	4-lane arterial
Railroad Avenue	Buenaventura Boulevard north 2,000 feet	4-lane arterial
S. Bonnyview Road	Sacramento River to SR 273	4-lane expressway/railroad overcrossing

FUTURE ROADWAY NETWORK		
Roadway	**Location**	**Improvements**
Shasta View Drive	Tarmac Road north 2,000 feet	4-lane arterial
SR 44	Airport Road to Deschutes Road	4-lane expressway
SR 44	Interstate 5 to Auditorium Drive	Add auxiliary lanes
Victor Avenue	Old Alturas Road to Hartnell Avenue	4-lane arterial
Interchange Improvements		
Interstate 5	at Cypress Avenue	Ramp improvements
Interstate 5	at Knighton Road - widening	4-lane freeway overcrossing
Interstate 5	at Oasis Road - new bridge	4-lane freeway overcrossing
Interstate 5	SR 44 interchange	Ramp improvements
Downtown Circulation Revision		
Tehama Street	California Street to Market Street	2 lanes eastbound/1 lane westbound
Court Street	Tehama to Eureka Way	New channelization
EB 299	East Street to Auditorium Drive	Add third lane
Market Street	Eureka Way to Tehama Street	Add one lane
Shasta Street	Market to Court Street	3-lane one-way (westbound)
Gold Street	Union Pacific Railroad	Undercrossing[2]

[1] This link may be reexamined if other options for modifying traffic flow in the East Cypress/Hilltop Drive/I-5 interchange area are identified and determined to be feasible.

[2] Crossing may be located at a location other than Gold Street.

APPENDIX "B"
TRANSPORTATION ELEMENT

The following streets will provide the basic framework for the City's expressway, arterial, and collector street systems. Unless otherwise indicated, the ultimate right-of-way should accommodate a minimum of four lanes as well as necessary turn pockets, center medians, and detached sidewalks. Variations in ultimate right-of-way width are expected due to circumstances such as proximity to existing development, slopes, bridge approaches, and other site-specific factors.

ARTERIAL STREETS

Lake Boulevard
Oasis Road
Old Oregon Trail
Hilltop Drive
Browning Street
Eureka Way
Buenaventura Boulevard
Placer Street
Cypress Avenue
Churn Creek Road
Shasta View Drive
Victor Avenue
Hartnell Avenue
South Bonnyview Road
Knighton Road
Rancho Road
Cedars Road
Old Alturas Road
Dana Drive
Clear Creek Road
Bechelli Lane (south of East Cypress Avenue)
Branstetter Lane
Quartz Hill Road[1]

COLLECTOR STREETS

Lakeside Drive[1]
Venus Way[1]
Alta Mesa Drive[1]
Harlan Drive[1]
Cumberland Drive[1]

EXPRESSWAY

State Route 273
Airport Road

[1] Two lanes

Natural Resources Element

Natural Resources Element

INTRODUCTION

PURPOSE AND CONTENT

The City of Redding is fortunate to have a wide range of resources within its Planning Area. These include the Sacramento River, creeks, ponds, wetlands, vernal pools, and groundwater resources; a variety of vegetation types and communities; wildlife; archaeological, historic, and cultural resources; mineral resources; and agricultural lands.

These resources contribute to the City's economy and are important elements of Redding's quality of life. Both responsible management and protection of these resources are needed. This Plan seeks to balance the need to accommodate growth with the need for the conservation, protection, and enhancement of the area's natural resources.

Most of the background data and information related to this element are contained within Chapter 9 of the City of Redding *General Plan Background Report*. Information regarding archaeological, historic, and cultural resources is contained in Chapter 8 of the same document.

Specific topics addressed within the Policy Document include:

- Surface Water.
- Groundwater.
- Biological Resources.
- Open Space.
- Archaeological, Historic, and Cultural Resources.
- Mineral Resources.
- Energy Resources and Conservation.
- Agricultural Lands.

Air quality, which is also considered a resource, is addressed in a separate Air Quality Element. Park and recreation facilities and programs are addressed within the City's Recreation Element.

AUTHORITY

In accordance with Government Code Sections 65302(d) and 65302(e), a general plan is required to include both a Conservation and an Open Space Element.

The Conservation Element is required to address the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The Conservation Element may also cover:

- The reclamation of land and waters.
- Prevention and control of the pollution of streams and other waters.
- Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.
- Prevention, control, and correction of the erosion of soils, beaches, and shores.
- Protection of watersheds.
- The location, quantity, and quality of rock, sand, and gravel resources.
- Flood control.

It is the intent of the Legislature that cities preparing general plans recognize open space as a limited and valuable resource to be conserved whenever possible. The Open Space Element is specifically required to consider open space for the preservation of natural resources (fish and wildlife habitat); open space used for the managed production of resources (food and fiber); open space for outdoor recreation, including areas of scenic, historic, and cultural value; and open space necessary to maintain the public health and safety.

The Conservation and Open Space Elements are commonly combined because of the overlapping topics each is required to address. The City of Redding has chosen to prepare a Natural Resources Element which effectively meets the statutory requirements of both documents.

GOALS AND POLICIES

SURFACE AND GROUNDWATER RESOURCES

The availability, quantity, and quality of water resources are vital to natural processes and human activities within any urban area. Water is essential to the development of housing, commerce and industry, agricultural operations, recreation, and the maintenance of high-quality fish and wildlife habitats.

Surface water within the Planning Area consists of the Sacramento River and numerous tributary creeks. There are also a number of ponds, most of which are in private ownership. In 1995, 58 percent of the City's water supply was drawn from the Sacramento River. Another 18 percent was drawn from the Spring Creek Conduit, which receives its water from Whiskeytown Lake. The remaining 24 percent of the City's water supply was drawn from wells located in the Redding Groundwater Basin.

In addition to the City of Redding, a number of water districts provide domestic and agricultural water within the Planning Area. These districts also obtain their supplies from a variety of sources, including the Sacramento River, Spring Creek Conduit, Muletown Conduit (which is also connected to Whiskeytown Lake), and wells.

The quality and quantity of water resources can be affected by a variety of activities including, but not limited to:

- Sedimentation and siltation resulting from erosion caused primarily by grading, construction, and the removal of vegetation.
- Increased stormwaterwater runoff and reductions in groundwater recharge created by covering the soil with buildings, pavement, and other impervious surfaces.
- Excessive pumping of groundwater.
- Excessive water consumption.
- Contamination resulting from the improper or excessive use of pesticides, herbicides, and fertilizers in conjunction with large agricultural operations, golf courses, and other urban uses.
- Contamination resulting from improperly managed urban stormwaterwater runoff, which often contains pesticides, herbicides, oil, grease, and heavy metals.
- Discharge of various chemicals and compounds into surface water, groundwater, or storm-drain systems through improper handling and disposal by businesses, industries, or individuals.
- Contamination resulting from high concentrations of on-site, sewage-disposal systems or systems installed in areas with unsuitable soils.
- Leaching of soils that have been contaminated by hazardous materials or substances.

Erosion and sedimentation control are the primary issues in the Redding area from a water-quality perspective. While the City recognizes the economic importance of allowing grading and other site-development activities to occur during what is considered the "rainy season" (typically October 15 through April 15), of equal or greater importance is the protection of our surface-water resources. Siltation of our waterways has dramatic negative effects on aquatic wildlife, including Federally protected species of anadromous fish. The following policies strike a balance between these objectives.

GOAL **NR1**

MINIMIZE SOIL-EROSION AND SEDIMENTATION PROBLEMS RESULTING FROM DEVELOPMENT ACTIVITIES; IMPROVE THE QUALITY OF STORMWATER RUNOFF.

Policies to achieve this goal are to:

NR1A. Establish a process for the development, review, and approval of erosion- and sedimentation-control plans of single-family residential construction and similar small projects.

NR1B. Require development applicants to submit and receive Public Works Department approval for erosion- and sediment-control plans prior to undertaking grading activities.

NR1C. Minimize soil erosion and sedimentation created during and after construction activities to the fullest extent practicable, using Best Management Practices (BMPs).

NR1D. Make project monitoring and enforcement activities a priority to ensure that erosion-control measures are in place prior to the start of the rainy season and function properly and effectively:

- Installed properly.
- In place prior to the start of the rainy season.
- Functional and effective.

NR1E. Aggressively pursue immediate remediation when erosion damage is discovered and/or initial control measures fail.

NR1F. Establish and levy fines for failure to comply with the requirements of the Grading Ordinance and/or an approved erosion- and sediment-control plan.

NR1G. Support and/or jointly sponsor erosion- and sedimentation-control training and education activities in conjunction with the development community.

NR1H. Ensure that employees responsible for monitoring and enforcing the City's Grading Ordinance receive adequate training regarding erosion- and sediment-control practices.

NR1I. Work with Shasta County and other regional, State, and Federal agencies to reduce the amount of toxic chemicals and other agents or pollutants entering the surface water system from agriculture, golf course, and urban runoff.

NR1J. Encourage neighboring jurisdictions to adopt and enforce consistent erosion- and sediment-control measures.

GOAL NR2

DEVELOP AND MAINTAIN ADEQUATE WATER SUPPLIES FOR DOMESTIC AND FIRE-SUPPRESSION PURPOSES.

Policies to achieve this goal are to:

NR2A. Continue to evaluate options for increasing the City's and other water providers' water supplies, including, but not limited to, acquiring additional allocations from the Sacramento River, development of additional wells, and enhancement of water-storage and treatment facilities.

NR2B. Encourage water-conservation practices including, but not limited to, use of:

- A tiered pricing system for water which is tied to the amount consumed by a household or business.
- Native plants or other plants with low water requirements in public and private development projects.
- Drip irrigation systems.
- "Gray water" for landscape irrigation if approved by Shasta County.

NR2C. Utilize water reclamation projects in landscape and agricultural uses if approved by the California Regional Water Quality Control Board and State Department of Health Services.

NR2D. Support efforts to limit exportation of surface water to other areas of the State and to protect local water rights.

GOAL

NR3

PRESERVE AND PROTECT THE QUANTITY AND QUALITY OF GROUNDWATER RESOURCES WITHIN THE PLANNING AREA.

Policies to achieve this goal are to:

NR3A. Provide maximum groundwater-recharge opportunities by maintaining the natural condition of waterways and floodplains to the extent feasible given flood-control requirements.

NR3B. Comply with the Regional Water Quality Control Board's regulations and standards to maintain and improve groundwater quality in the Planning Area.

NR3C. Support the preparation of a groundwater management plan for the Redding Groundwater Basin that will address long-term sustainability of the resource.

NR3D. Support efforts to prevent exportation of groundwater to other areas of the State and to retain local control over the resource.

NR3E. Work with appropriate State, Federal, and local agencies to protect, improve, and enhance groundwater quality in the region.

GOAL

NR4

PREVENT AND REMEDY SURFACE-WATER, GROUNDWATER, AND SOIL CONTAMINATION.

Policies to achieve this goal are to:

NR4A. Discourage the establishment of any new septic systems, except in areas where residential densities are low (1–5 units per acre and larger) and soils are suitable for septic system use.

NR4B. Continue to accept, recycle, and/or properly dispose of household hazardous wastes through ongoing operation of the City's Household Hazardous Waste Collection Program.

NR4C. Work with appropriate local, State, and Federal agencies to ensure that those responsible for soil, surface-water, and/or groundwater contamination are required to initiate, monitor, and complete full remediation activities.

NR4D. Work with Shasta County and other appropriate agencies to educate the public and business owners regarding proper handling and disposal of hazardous materials and household hazardous wastes.

NR4E. Establish and enforce penalties for illegal dumping of both hazardous and nonhazardous materials.

BIOLOGICAL RESOURCES

Unlike many urban areas, the Redding Planning Area contains a variety of biological and wildlife resources. Generalized habitat mapping of the Planning Area has been completed through the use of three different processes: Satellite Imagery Mapping, Riparian Mapping, and Vernal Pool Complex Mapping. Methodology for both the Riparian and Vernal Pool Complex mapping efforts involved the use of infrared aerial photos and field surveys. Although this data should not be considered site-specific, it does provide a reasonably accurate composite of basic habitat types and their general distribution throughout the Planning Area.

Major habitat types or communities within the Planning Area include:

- Woodland (Blue Oak-Grey/Digger Pine).
- Annual Grasslands.
- Mixed Chaparral.
- Riparian.
- Aquatic.
- Vernal Pools.
- Wetlands.
- Irrigated Agriculture and Urban Vegetation.

For purposes of this General Plan, the following habitat types are considered sensitive and require special consideration when developing within or in proximity of them: riparian, vernal pools, aquatic, and wetlands.

These habitats support a variety of both plant and animal species, some of which are classified as special status species. Special status species include:

- Species that are listed or proposed for listing as Threatened or Endangered under the State or Federal Endangered Species Acts.
- Species that meet the definition of rare, unique, or endangered under the California Environmental Quality Act (CEQA).
- Species listed as "Species of Special Concern" by the California Department of Fish and Game (DFG).

Potential impacts to sensitive habitats and/or special status species must be mitigated in accordance with the requirements of the California Environmental Quality Act.

Because the potential for finding special status species is particularly high in vernal pools and vernal pool complexes, Figure 3-1 shows the approximate locations of known vernal pool resources. These resources are located within the Stillwater Creek and Clover Creek basins. Note that this figure is not intended to represent the locations of all vernal pools within the Planning Area. Proper field documentation by a qualified biologist or botanist must be provided with all development proposals located in areas considered to have a high probability of containing vernal pools.

GOAL NR5

PRESERVE AND PROTECT THE SIGNIFICANT HABITATS, PLANTS, AND WILDLIFE THAT EXIST IN THE PLANNING AREA.

Policies to achieve this goal are to:

NR5A. Minimize the disruption of sensitive habitat caused by new development by encouraging innovative design and site planning and establishing performance standards for habitat protection.

NR5B. Work to preserve and enhance fisheries in the Sacramento River and those streams or stream segments identified on Figure 3-2.

NR5C. Maintain and update data and information regarding areas of significant biological value within the Planning Area to:

- Provide critical information to the community.
- Facilitate resource conservation.
- Facilitate appropriate management of development activities.

GOAL NR6

PROTECT "SPECIAL STATUS" PLANT AND ANIMAL SPECIES; PRESERVE AND PROTECT CREEK CORRIDORS, RIPARIAN AREAS, VERNAL POOLS, AND WETLANDS.

Policies to achieve this goal are to:

NR6A. Preserve watercourses, vernal pools, riparian habitat, and wetlands in their natural state to the extent feasible. Fully mitigate unavoidable adverse impacts such as wetland filling or disturbance.

NR6B. Provide adequate buffering of sensitive habitats whenever necessary. Buffer size should be based upon the type of habitat as well as its size and habitat value.

NR6C. Ensure that uses allowed within riparian corridors:

- Minimize the creation of erosion, sedimentation, and increased runoff.
- Emphasize retention and enhancement of natural riparian vegetation.
- Provide for unimpaired passage of fish and wildlife.
- Avoid activities or development of new features that result in disturbance or dispersal of wildlife.
- Avoid channelization.
- Avoid substantial interference with surface and subsurface flows.
- Incorporate natural vegetation buffers.

Figure 3-1 Major Vernal Pool Complexes

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October 3, 2000

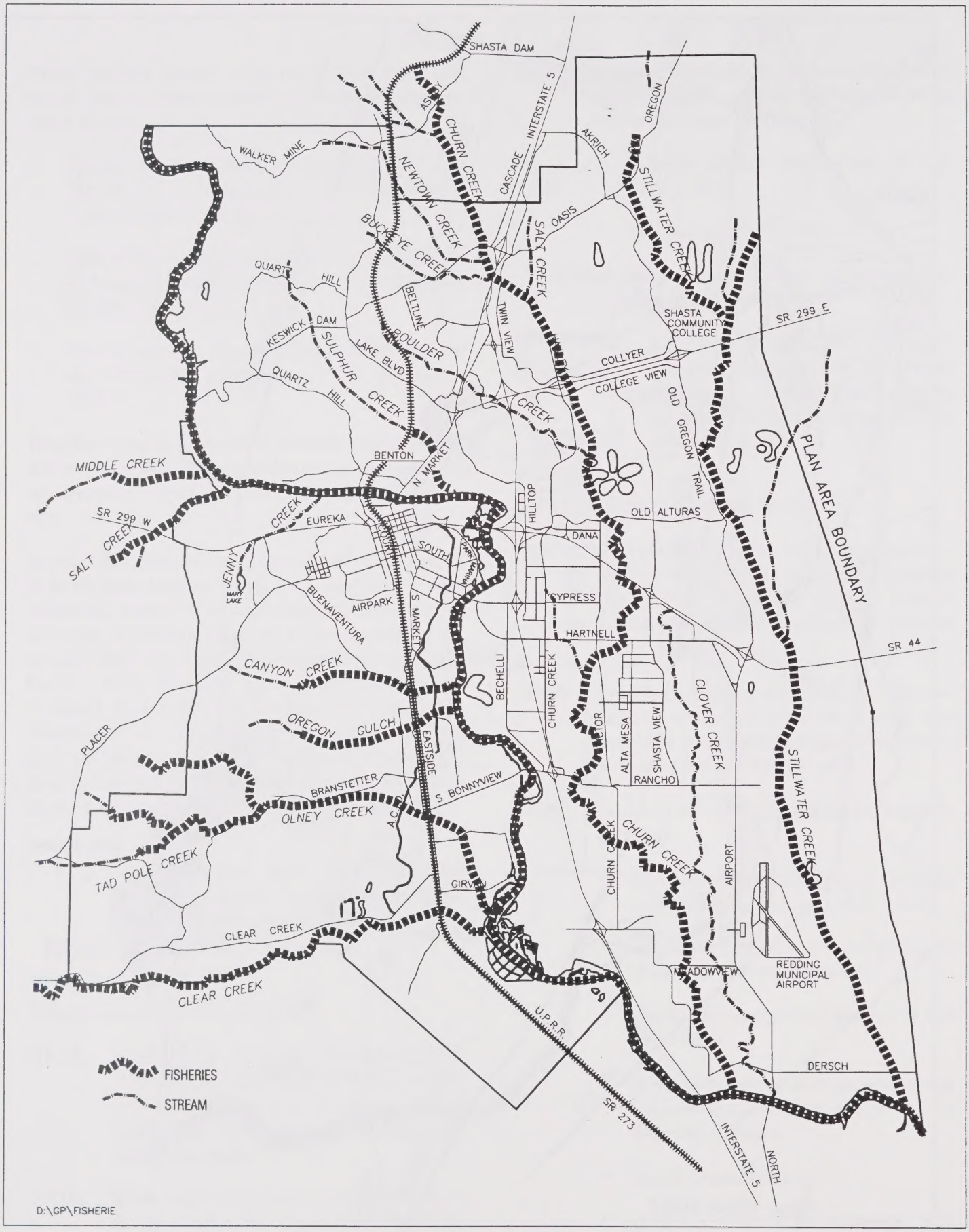
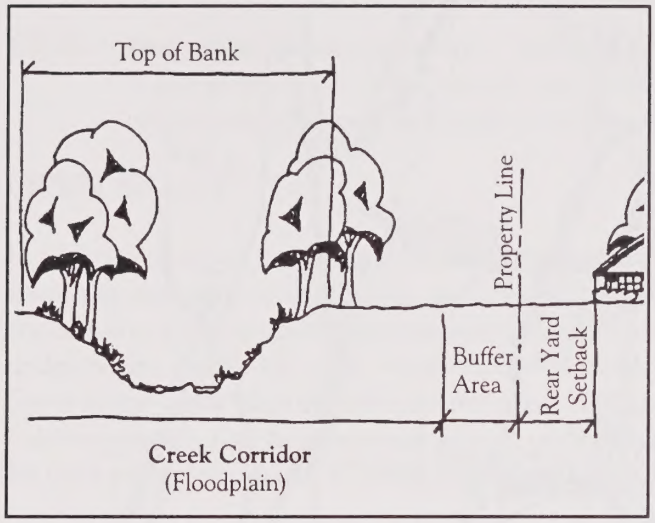


Figure 3-2 Fisheries

NR6D. Amend the Municipal Code to implement minimum river and creek corridor development setbacks (buffer areas) in accordance with Figure 3-3. These setbacks may be modified based on project/resource-



specific circumstances and appropriate mitigation. These buffer areas should be dedicated or a permanent conservation easement granted to the City as a condition of development approval.

NR6E. Strive to conserve all "special status species" within the Planning Area. Ensure implementation of statutory protection for these species.

NR6F. Support public and private efforts to establish habitat mitigation banks, habitat conservation plans, conservation easements, and other mechanisms that serve to protect sensitive habitats and species.

NR6G. Ensure implementation of policies and regulations for protection of those wildlife species having statutory protection under local, State, and/or Federal laws.

GOAL NR7

RECOGNIZE THE AESTHETIC AND BIOLOGICAL VALUES OF OAK WOODLANDS AND OTHER NATURAL VEGETATION.

Policies to achieve this goal are to:

NR7A. Promote existing native oaks, especially valley oaks, by establishing standards for the design of development projects. The preservation of stands of trees within developments is preferred over preservation of individual trees, with the exception of special-status species and heritage trees.

NR7B. Identify and establish appropriate "tree mitigation areas" to be used for the planting of native trees in concert with development project mitigation.

GOAL NR8

RECOGNIZE AND PROTECT HABITAT LINKAGES AND MIGRATORY CORRIDORS.

Policies to achieve this goal are to:

NR8A. Maintain, where possible, the habitat linkages/wildlife corridors and sensitive habitats that are created by the open-space ("Greenway") network established by this General Plan. Require development in areas depicted as "Greenway" on the General Plan Diagram to consider corridor impacts and, where necessary, provide alternate usable links between habitat types or areas and/or provide alternate development plans that avoid the open-space network and sensitive habitats.

NR8B. Maintain and preserve other natural habitat linkages and wildlife corridors in the City where feasible. Discourage development impacts to these linkages and corridors and fully mitigate associated unavoidable adverse impacts.

GOAL NR9

PROMOTE AND FACILITATE HABITAT PRESERVATION, RESTORATION, AND ENHANCEMENT.

Policies to achieve this goal are to:

NR9A. Encourage the acquisition, preservation, restoration, and enhancement of native

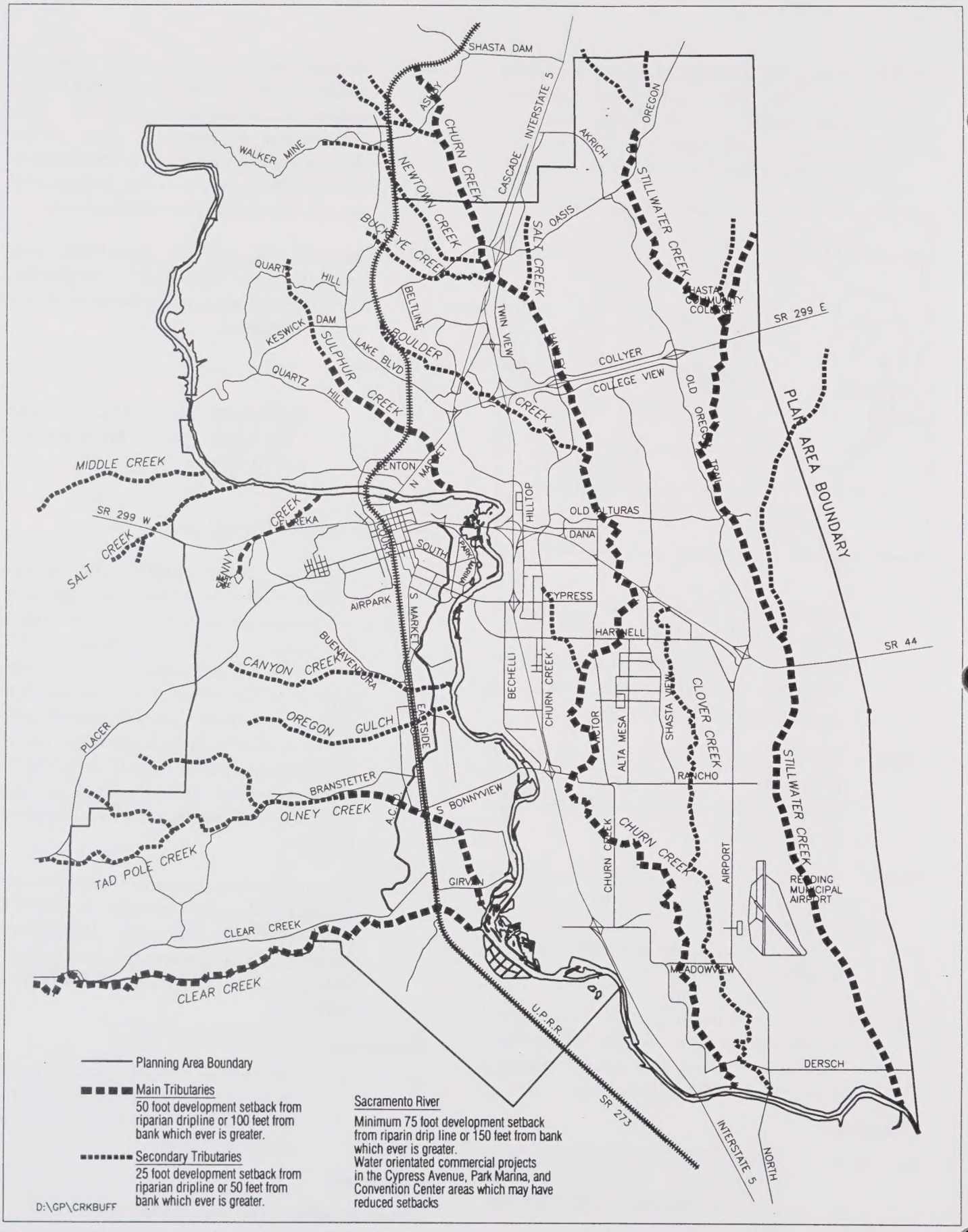


Figure 3-3 River And Creek Corridor Buffer Widths

vegetation with a focus on wetlands and riparian habitat that will improve the biological value and integrity of the City's natural resources. Encourage native landscape in unvegetated, manmade areas such as along streets and in abandoned lots.

NR9B. Encourage education and community involvement in the protection and enhancement of local biological resources.

OPEN SPACE

In addition to protecting life and property, open-space areas are essential to the health and livability of a community. Open space may consist of developed and undeveloped parklands (see Recreation Element). Open-space lands also include natural areas, either public or private, that have been set aside in perpetuity for their ecological, visual, or safety-related aspects.

Redding is fortunate to have an extensive open-space network. The heart of this network is the Sacramento River. Into the river flows numerous tributary streams that, for the most part, originate in steep terrain to the west and north of the city. Policies of this and past General Plans have set aside these slope and stream-side areas from development. Together, they represent many square miles of open space. These lands are depicted on the General Plan Diagram as "Greenway" and are subject to the development constraints proposed by this Plan. Figure 3-4 depicts the open-space lands that were under direct public control at the time this Plan was adopted.

While open space is valuable in and of itself, connectivity and public accessibility enhance this value appreciably. Policies contained in the Community Development and Design Element address the need to provide public access to these open-space corridors. The Recreation Element calls for the development of a comprehensive Trail Master Plan that will eventually afford all citizens access to and through many natural areas that seem remote from the hustle and bustle of city life.

As discussed in detail within the Health and Safety Element, the Redding Planning Area contains several natural features which are considered hazardous for development. These include areas containing excessive slopes (greater than 20 percent) and areas within the 100-year floodplain of the Sacramento River or its tributaries. In the interest of public safety and to reduce the potential for loss of life or property damage from wildland fires or floods, it is essential that development restrictions be applied within these hazard areas.

GOAL

NR10

PRESERVE AREAS CONTAINING EXCESSIVE SLOPES OR 100-YEAR FLOODPLAINS AS OPEN SPACE TO PREVENT LOSS OF LIFE AND PROPERTY DAMAGE AND TO PROVIDE VALUABLE HABITAT AND RECREATIONAL OPPORTUNITIES.

Policies to achieve this goal are to:

NR10A. Require as a condition of development approval public dedication (in fee)of flood-prone lands adjacent to the Sacramento River and those tributary streams identified on Figure 3-3. Exceptions to this policy may be made based on: (1) the provisions of any adopted specific plan or (2) approval by the City in consideration of special circumstances unique to a flood-prone area where the extent of flooding is largely dictated by inadequate drainage improvements, where an entire parcel is constrained by floodplain, and/or where the flooding occurs within a developed area.

NR10B. Preserve land publicly dedicated under Policy NR10A as open space. Development in these areas will be restricted to passive, low-impact uses that minimize removal of existing vegetation and maintain or increase the existing habitat value, while providing adequate protection from wildland fires.

NR10C. Require, as a condition of development approval, that private open-space easements be established for significant areas of nondeveloped lands that exceed a slope of 20 percent. Use public dedications and/or trail easements when necessary to connect these areas to existing or proposed public open space.

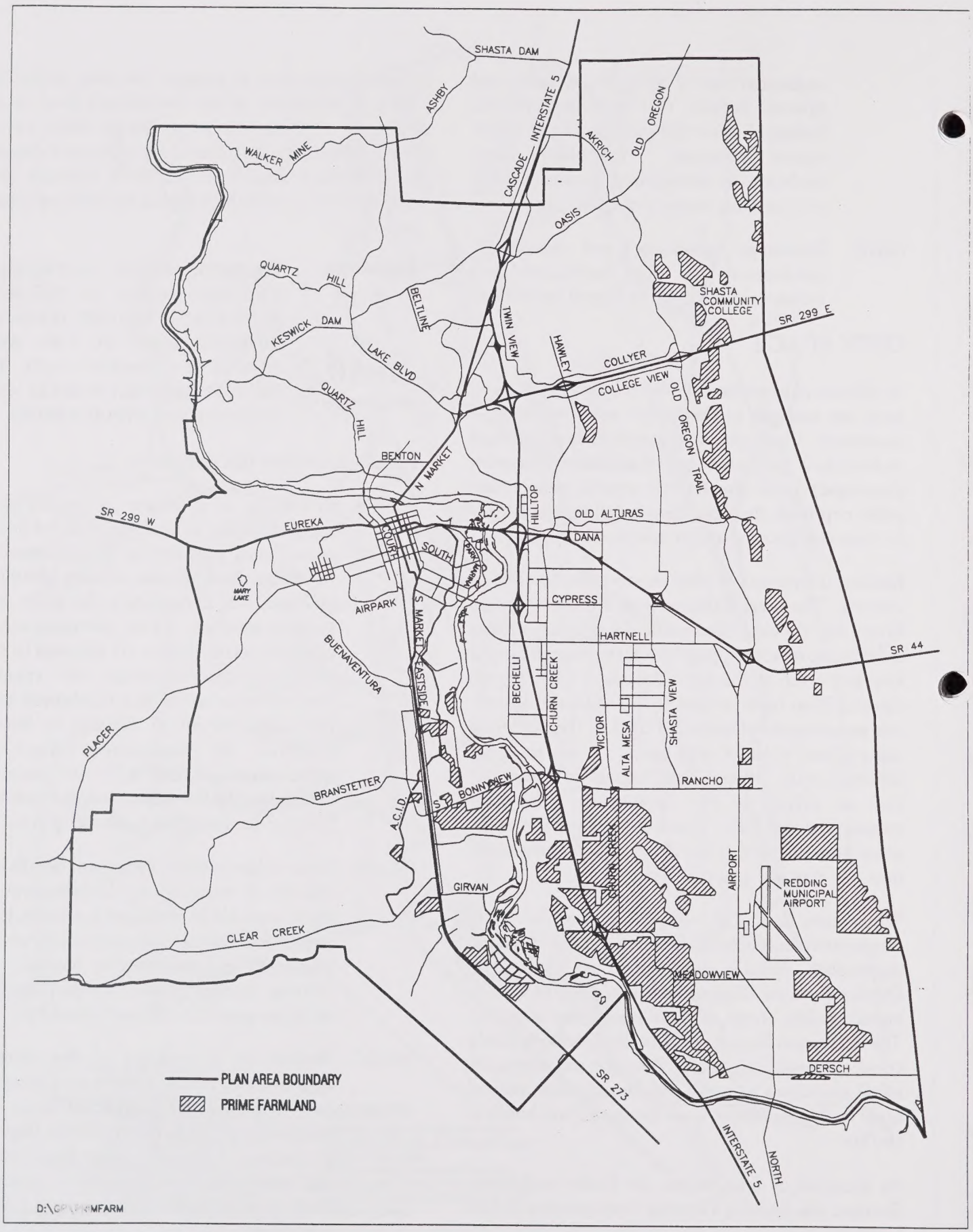


Figure 3-4 Prime Farmland

GOAL **NR11** PROMOTE THE PRESERVATION AND APPROPRIATE PUBLIC USE OF KEY OPEN-SPACE LANDS WITHIN THE COMMUNITY.

Policies to achieve this goal are to:

NR11A. Develop a Comprehensive Open Space Plan that addresses the following items:

- Framework for open-space lands.
- Role of public and private open-space lands.
- Agricultural land preservation.
- Important ecological areas.
- Acquisitions and management of public open-space land.

ARCHAEOLOGICAL, HISTORIC, AND CULTURAL RESOURCES

Due to the presence of the Sacramento River and its numerous tributary creeks, the Redding Planning Area has a relatively high potential for cultural resources. The river, creeks, and old river terraces are prime locations for cultural resource sites, both prehistoric and historic. Through records kept at the Northeast Information Center at California State University, Chico, 213 prehistoric sites have been located and documented. Two archaeological sites have been listed on the National Register of Historic Places. Many more sites are likely to exist and could be susceptible to inadvertent destruction during construction and development activities if precautions are not implemented.

Redding also has numerous historic structures dating from the late Victorian period and good examples of architecture dating from the 1920s to the 1940s, including Art Deco and Works Progress Administration (WPA) period buildings. Only three of the City's historic structures (Old City Hall—1313 Market Street; Pine Street School—1135 Pine Street; and the Frisbie House—1246 East Street) have been listed on the National Register of Historic Places. However, many more of the City's historic structures would likely qualify for nomination to the National Register or other State and local registers, either as individual structures or as historic districts.

GOAL **NR12** PROTECT AND ENHANCE HISTORICAL AND CULTURALLY SIGNIFICANT RESOURCES WITHIN THE PLANNING AREA.

Policies to achieve this goal are to:

NR12A. Ensure protection of prehistoric, cultural, and archaeological resources during the development process.

NR12B. Refer development proposals that may adversely affect archaeological sites to the California Archaeological Inventory, Northeast Information Center, at Chico State University.

NR12C. Encourage public and private efforts to identify, preserve, protect and/or restore historic buildings, structures, landmarks, and important cultural resources.

NR12D. The City shall not knowingly approve any public or private project that may adversely affect an archaeological site without first consulting the Archaeological Inventory, Northeast Information Center, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendations of a qualified archaeologist. City implementation of this policy shall be guided by Appendix "K" of the *CEQA Guidelines*.

MINERAL RESOURCES

Mineral deposits within the Planning Area consist of copper, gold, tungsten, and gravel. In addition, the area around the Redding Municipal Airport contains gas-bearing strata. The westerly portion of the Planning Area has been mined in the past for placer and lode gold, tungsten, and copper. Most previous mining efforts did not prove to be economically viable. However, this is likely to change in the future as the value of precious metals continues to increase. Gravel-bearing deposits exist along the Sacramento River,

Clear Creek, Olney Creek, Churn Creek, and Stillwater Creek.

In 1997, the California Department of Conservation, Division of Mines and Geology (DMG) published a DMG Open File Report 97-03 entitled, *Mineral Land Classification of Alluvial Sand and Gravel, Crushed Stone, Volcanic Cinders, Limestone, and Diatomite Within Shasta County, California.* The primary purpose of the report is to identify the known or inferred mineral potential of lands within the County to ensure that the mineral potential of land is recognized by local government decision-makers and considered before land use decisions are made that could preclude future mining. The report also contains 50-year projections for population and per capita consumption of aggregate and a comparison between the estimated 50-year aggregate demand and current reserves.

The findings of the report indicate that current known concrete-grade alluvial aggregate reserves within Shasta County are calculated to be approximately 30.3 million tons. Based on a historic aggregate consumption rate of 8.0 tons per person per year, the report estimates that current known reserves are likely to be depleted within 17 years. This information highlights the importance of protecting both known and inferred deposits from encroachment by potentially incompatible land uses.

Land classifications utilized in the referenced DMG report are presented in the form of Mineral Resource Zones (MRZs). Each zone type relates to the degree of knowledge about a mineral resource occurrence and the economic characteristics of the deposits. Areas of identified mineral resource significance, either demonstrated/measured or inferred, are classified as MRZ-2a or MRZ-2b.

Although most areas along the Sacramento River are classified as MRZ-2a or 2b in the 1997 DMG Report, the presence of existing incompatible development will preclude mineral-extraction activities in those locations. Conversely, areas classified as MRZ-2a and 2b, where mineral-extraction activities are considered feasible, have been designated with a "Critical Mineral Resources Overlay" on the General Plan Diagram.

GOAL

NR13

ENSURE AN ADEQUATE SUPPLY OF MINERAL RESOURCES TO MEET LONG-TERM REGIONAL NEEDS.

PROTECT CRITICAL MINERAL RESOURCE AREAS FROM ENCROACHMENT BY INCOMPATIBLE LAND USES.

Policies to achieve this goal are to:

NR13A. Focus mineral resource-protection efforts in areas identified with a "Critical Mineral Resource Overlay" on the General Plan Diagram. Remove the "Critical Mineral Resource Overlay" when the mineral resource is exhausted and reclamation completed.

NR13B. Maintain current information regarding the status and location of mineral deposits within the Planning Area.

NR13C. Prohibit incompatible development in or near areas designated "Critical Mineral Resource Overlay." Residential uses within overlay areas should be limited to 1.0 dwelling unit per 40 acres.

NR13D. Require a use permit to establish new mining operations. The use permit shall contain conditions necessary to protect the public health, safety, and welfare; to minimize impacts on adjacent land uses; and to mitigate other potential adverse environmental impacts.

NR13E. Outside Critical Mineral Resource Overlay areas (but within areas classified as Mineral Resource Zones MRZ2a and/or MRZ2b by the State Division of Mines and Geology), mining may be permitted in the in-stream, floodplain, or gravel bar areas of a river or creek provided removal of sand and gravel is:

- Conducted during a declared civil or hazardous material emergency or natural disaster to relieve or correct potential hazards to the public health, safety, or welfare caused by such emergency or disaster.

- For removal of dredger tailings for reclamation purposes only.
- To protect a public structure, such as a bridge, when it is determined to be necessary by the public entity responsible for said structure.
- To remove a buildup of sand and gravel to maintain the channel capacity and prevent flooding.

For Items 2, 3, and 4 above, the use permit and reclamation plan for mining of said areas shall be based on a stream management program, prepared by qualified professionals in appropriate disciplines, which includes data and analysis to show that:

- There will be no significant adverse impact on in-stream habitat; riparian habitat; wetlands; or rare, threatened, or endangered species of fish, wildlife, or plants.
- There will be no significant adverse impact on existing structures, including bridges or levees.
- There will be no significant increase in bank erosion, deposition, or flooding.
- There will be no significant adverse impacts to surrounding properties, including, but not limited to, noise, visual impacts, dust, and similar impacts.

ENERGY RESOURCES AND CONSERVATION

Electricity within the City limits is provided by the City of Redding through its transmission and distribution system. Natural gas—and electric service within the remainder of the Planning Area—is provided by Pacific Gas and Electric Company (PG&E). The City's goal is to provide electric service to both residents and businesses at the lowest possible rates, while maintaining system reliability in an environmentally responsible manner. System planning and needed facilities are addressed in the Public Facilities and Services Element. However, there is also a need to encourage conservation and the use of alternative forms of energy, such as solar, to ensure that energy resources are utilized responsibly and long-term demands can be met. A similar emphasis on conservation should be promoted for all nonrenewable energy sources.

Another important energy-conservation strategy is to actively pursue the benefits obtained from resource-recovery and recycling programs. It is well-documented that in most instances, the reuse of materials utilizes less energy (and resources) than producing products from raw materials.

GOAL NR14

REDUCE CONSUMPTION OF NONRENEWABLE ENERGY SOURCES AND SUPPORT THE DEVELOPMENT AND UTILIZATION OF NEW ENERGY SOURCES.

Policies to achieve this goal are to:

NR14A. Provide an electric usage analysis and efficiency recommendations for those customers who request the service.

NR14B. Encourage electric utility customers to alter their consumption of electric power to reduce the City's overall and peak electric load.

NR14C. Explore the commercial viability of extracting natural gas resources within the vicinity of the Redding Municipal Airport.

NR14D. Continue current source-reduction, recycling, and composting programs that are contained in the joint County of Shasta, City of Redding, and City of Anderson Source Reduction and Recycling Element. (This element is not a part of this General Plan.)

NR14E. Encourage design that takes advantage of solar orientation and access.

AGRICULTURAL LANDS

The source of information on soils within the Planning Area used for this General Plan is limited to the soil maps prepared by the Natural Resource Conservation Service (NRCS) and the California Department of Conservation (CDC) Important Farmland Series Mapping and Monitoring Program.

The NRCS classification system organizes soils into eight major capability classes designated by Roman numerals I through VIII. Class I and II soils are considered "prime" and have the fewest limitations in terms of range of use. The other soil classifications have progressively greater natural limitations.

The CDC Important Farmland Series Mapping and Monitoring Program designates important farmlands in California based on NRCS soil surveys and available land use data. This system is also classified into eight categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban Land, Other Land, and Land Committed to Incompatible Uses. Acreages associated with each CDC system category and its percentage of the total acreage of the Planning Area are summarized in Table 9-1 in the *General Plan Background Report.*

According to the referenced information, there are approximately 5,019 acres of Prime Farmland within the Planning Area. These soils are depicted on Figure 3-5.

GOAL

NR15

PROMOTE THE ECONOMIC VIABILITY OF AGRICULTURE IN AREAS SUITED FOR AGRICULTURAL USE.

Policies to achieve this goal are to:

NR15A. Protect existing prime agricultural soils outside the primary and secondary growth areas and freeway interchange areas with lot sizes (five acres and larger) capable of supporting agricultural operations.

NR15B. Discourage the cancellation of Williamson Act contracts until it is demonstrated that the lands with such contracts will be needed for urban development in the immediate future.

NR15C. Establish performance criteria to minimize impacts of urban development near existing income-producing agricultural lands on agricultural practices and reduce conflicts between urban and agricultural uses.

Health and Safety Element

Health and Safety Element

INTRODUCTION

PURPOSE AND CONTENT

Safety hazards can occur as either a result of the actions of nature or works of man. The intent of the Health and Safety Element is to document potential hazards that must be considered when planning the location, type, and density of development throughout the Planning Area. A major objective is to reduce loss of life, injuries, and property damage which could result from a range of both natural and manmade hazards.

Background data and information for this element are contained within Chapter 10 of the City of Redding *General Plan Background Report*.

Specific topics addressed within the Policy Document include:

- Seismic and Geologic Hazards.
- Flood Hazards.
- Dam Failure Inundation.
- Urban and Wildland Fire Hazards.
- Crime Prevention.
- Airport-Related Hazards.
- Emergency Response.
- Hazardous Materials.
- Critical, Sensitive, and High-Occupancy Facilities.
- Evacuation Routes.

AUTHORITY

Pursuant to Government Code Section 65302(g), a general plan is required to include:

> *A Safety Element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground-shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. It shall also address evacuation routes, peak-load, water-supply requirements, and minimum road widths and clearances around structures as those items relate to identified fire and geologic hazards.*

GOALS AND POLICIES

SEISMIC AND GEOLOGIC HAZARDS

Most of the background information concerning seismic safety within the Planning Area has been derived from a detailed report entitled *Seismic Hazards Assessment for the City of Redding, California*, prepared by Woodward-Clyde Federal Services in 1995. That report notes that there are several faults located in the Redding region and suggests that there are no "active" faults within 30 miles of the City. However, since its publication, the Redding area has had numerous earthquake events with the strongest reported at a magnitude 3.5. Little is known about the fault responsible for these events, except that it is located approximately five miles northwest of Redding at a depth of 15.7 miles.

To date, the largest historical earthquake observed in the Redding region was the 1940 magnitude 5.7 Chico event. However, geologic and geophysical evidence cannot preclude the possibility of a larger earthquake. The Woodward-Clyde study reports that the largest potential earthquake which may affect Redding is a magnitude 7 event.

Of the various seismic hazards that could impact the Planning Area, ground-shaking and liquefaction (transformation of water-saturated granular soils to a liquid state during ground-shaking) are the most significant. Areas with the highest potential for liquefaction are located along the Sacramento River and its tributaries. Sites with low liquefaction potential are generally located in the gently sloping areas between the river and the foothills. Sites within the foothills are considered to have no liquefaction potential. Figures 4-1 and 4-2 identify areas prone to ground-shaking and liquefaction, respectively.

Seismically-triggered landslides are possible within the westernmost part of the Planning Area. Other types of ground failure, including expansive soils (those that swell when wet and shrink as they dry) and subsidence (gradual settling or sinking of an area with little or no horizontal motion), are not considered to pose a significant hazard within the Planning Area.

Information contained within Chapter 9 of the City of Redding *General Plan Background Report*, indicates that approximately 11,000 acres within the Planning Area contain erosive soils (soils with the greatest potential for erosion, particularly when disturbed by construction or vegetation removal). These soils are typically found on slopes exceeding 15 percent.

Seiches (earthquake-generated waves within a lake, reservoir, or bay) could potentially be generated in both Shasta Lake and Whiskeytown Lake due to very strong ground-shaking. The effects of such seiches would depend on the local conditions at the time. If either reservoir were filled to capacity, there could be some amount of overspill, most likely by way of the dam spillways rather than by overtopping the dams themselves. It would require a seiche of over 65 feet in height to overtop Shasta Dam, even if the reservoir were filled to capacity. In the case of Lake Shasta, it is anticipated that Keswick Dam would regulate the excess flow into the Sacramento River, thereby minimizing any inundation hazard.

Redding is distant enough from the three active Cascade volcanoes in the region (Lassen Peak, Mount Shasta, and Medicine Lake Volcano) that it is unlikely that the Planning Area would be significantly affected by a volcanic eruption. In the case of an eruption of Mount Shasta, volcanic ash may fall into the northern part of the Planning Area, and minor seiches could be generated in Lake Shasta by debris flows into the arms of the lake where its tributaries enter.

GOAL **HS1**

MINIMIZE THE LOSS OF LIFE, INJURY, AND PROPERTY DAMAGE DUE TO SEISMIC AND GEOLOGIC HAZARDS.

Policies to achieve this goal are to:

HS1A. Continue to require that new structures and alterations to existing structures comply with the seismic safety requirements of the Uniform Building Code (UBC); adopt updated provisions of

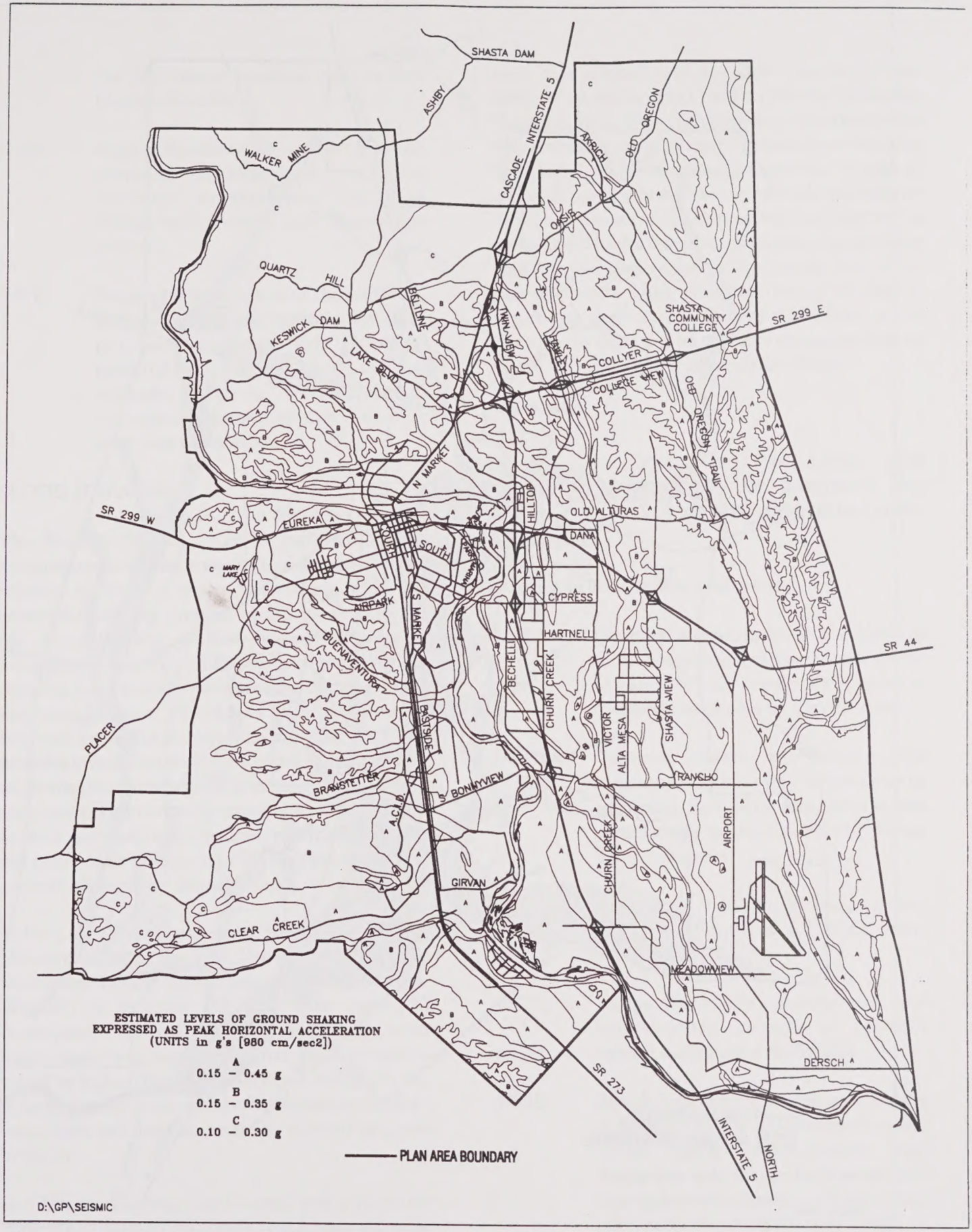


Figure 4-1 Ground Shaking Potential

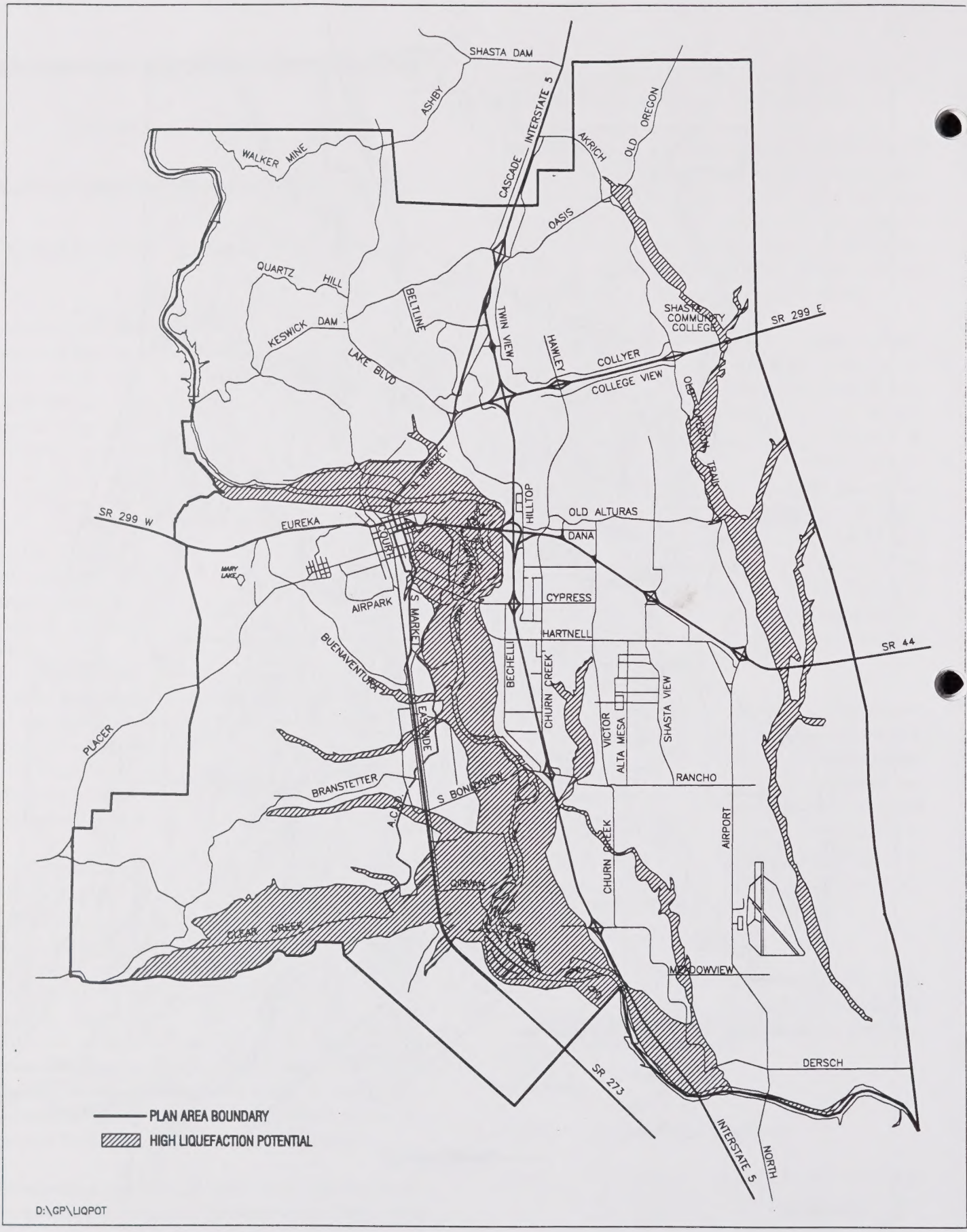


Figure 4-2 Liquefaction Potential

the UBC related to seismic safety as they become available.

HS1B. Require liquefaction mitigation plans for proposed developments, including necessary infrastructure in areas determined to have a "high" liquefaction potential.

HS1C. Require determination of the landslide, slope-instability, and erosion potential of proposed development sites located in potential hazard areas. Utilize building setbacks, grading techniques, or appropriate measures when constructing in or near unstable areas.

FLOOD HAZARDS

The Redding Planning Area is traversed by the Sacramento River and a number of streams that are tributary to the river system, each of which has the potential to damage property and/or result in loss of life from flooding. The Federal Emergency Management Agency (FEMA) is responsible for mapping flood-prone areas under the National Flood Insurance Program. FEMA uses a 100-year storm as the basis for its flood determinations and calculates probable inundation profiles for major drainages based on existing land uses in each drainage. These profiles are projected onto existing topography in each basin. Most of the flooding information provided by FEMA was prepared in 1998, using 1985 land use data in the majority of the area's drainage basins.

In 1993, the City undertook a comprehensive study of all major basins in the City, known as the *Citywide Master Storm Drain Study* (prepared by Montgomery-Watson), to ascertain the effect that post-1985 development has had on flood levels. In most instances, it was determined that flood elevations would be higher than those estimated by FEMA, due in large measure to increased urbanization in the area's watersheds and more accurate information on storm intensity.

In 1994, the Redding City Council took a proactive approach to protect flood-prone areas by amending the Municipal Code (Floodplain Ordinance) to recognize studies that establish a higher base flood elevation than does FEMA and to adopt specific policies designed to reduce flood-hazard potential within the Planning Area. Part of this strategy is to require the use of storm-water detention facilities to ensure that flood levels do not increase in elevation. A regional approach was determined to be preferable to relying on individual project facilities; however, this approach is complicated by the fact that significant portions of the region's creeks are located in the jurisdictions of the City of Shasta Lake and the County of Shasta. Figure 4-3 depicts the 100-year floodplains of the Sacramento River and its tributary streams as mapped by the Citywide Master Storm Drain Study.

GOAL

HS2

PROTECT THE LIVES AND PROPERTY OF RESIDENTS AND VISITORS FROM FLOOD HAZARDS.

Policies to achieve this goal are to:

HS2A. Continue to participate in the National Flood Insurance Program to ensure the availability of Federally-sponsored floodplain insurance for City residents.

HS2B. Continue efforts to reduce flood insurance premiums for City residents by restricting floodplain development and participating in the Community Rating Service Program.

HS2C. Make maps available showing updated flood projections from a 100-year storm event.

HS2D. Design both new development and redevelopment projects to minimize hazards associated with flooding.

HS2E. Strictly limit development in areas subject to flooding from a 100-year storm event. Allow minor encroachments into floodplains only if it can be demonstrated that such encroachments will not impact other properties or significantly contribute to a cumulative effect of other encroachments.

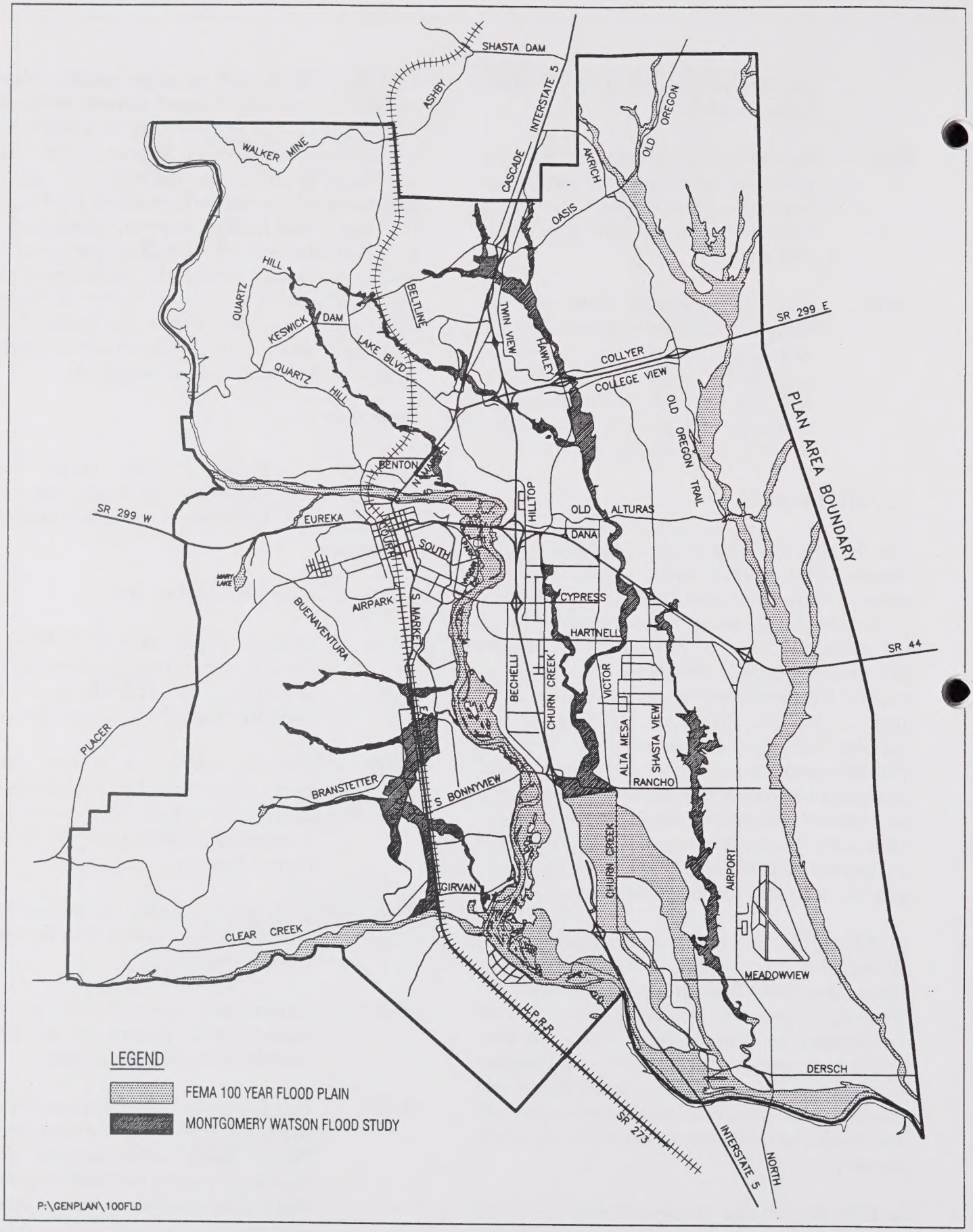


Figure 4-3

100 Year Flood Plain

HS2F. Continue to utilize the Storm Drain Utility and Storm Drainage Construction Tax, or similar measures, as funding mechanisms for necessary drainage improvements throughout the City.

HS2G. Establish a regional storm-water detention system at appropriate locations in area watersheds in cooperation with adjacent jurisdictions. Storm-water basins should be designed to allow passive or active recreational uses. Consider establishing basins within those areas depicted in Figure 4-4.

HS2H. Require new development to demonstrate that existing and/or planned (on- or off-site) drainage facilities are sized to accommodate project storm runoff and to prevent off-site increase in peak runoff rates and flood elevations.

DAM FAILURE INUNDATION

The Planning Area's position downstream from two major dams (Shasta and Whiskeytown) places it in an unusual category of flood risk. According to 1994 modeling studies conducted by the United States Bureau of Reclamation, significant failure of Shasta Dam would have a catastrophic effect on low-lying areas within the southern half of the Planning Area. Significant failure of Whiskeytown Dam would also be extremely damaging to low-lying areas within the southern third of the Planning Area. The anticipated inundation resulting from the unlikely failure of Shasta Dam is shown on Figure 4-5. Similar information relating to Whiskeytown Dam is shown on Figure 4-6.

GOAL **HS3** MINIMIZE THE POTENTIAL FOR CATASTROPHIC IMPACTS AS A RESULT OF REGIONAL DAM FAILURES.

Policy to achieve this goal is to:

HS3A. Ensure that the City's *Disaster Response Plan* includes procedures to address potential flooding created by uncontrolled releases from Shasta and Whiskeytown Dams and procedures for the efficient and orderly notification and evacuation of potential dam inundation areas.

URBAN AND WILDLAND FIRE HAZARDS

The Redding area is subject to both urban and wildland fire hazards.

Many residential, commercial, and industrial structures within the City are subject to fire hazards related to electrical shorts, industrial accidents, arson, or simple carelessness. These risks are generally greatest in older structures constructed before strong building, zoning, and fire codes were enacted.

Wildland fire hazards also exist within the numerous gulches and heavily wooded slopes found in the Planning Area. Areas of particular concern are those where wildland features and urban development interface. The presence of urban uses adjacent to wildlands increases the potential for wildland fires and property damage or injury. These interfaces also allow fires to spread more rapidly to other urban and rural areas. Portions of the Planning Area designated by the State of California with the highest wildland fire potential are shown on Figure 4-7.

GOAL **HS4** MINIMIZE THE POTENTIAL FOR LOSS OF LIFE, INJURY, AND PROPERTY DAMAGE RESULTING FROM URBAN AND WILDLAND FIRES.

Policies to achieve this goal are to:

HS4A. Maintain an Insurance Service Office (ISO) rating of 3 or better.

HS4B. Require that all new development and redevelopment meet State and local standards for fire protection; encourage the upgrade of existing structures to current standards.

HS4C. Work with local water districts to ensure that district systems are developed, maintained, and monitored to provide minimum fire-flow, rates, and peak-load capacity for fire suppression.

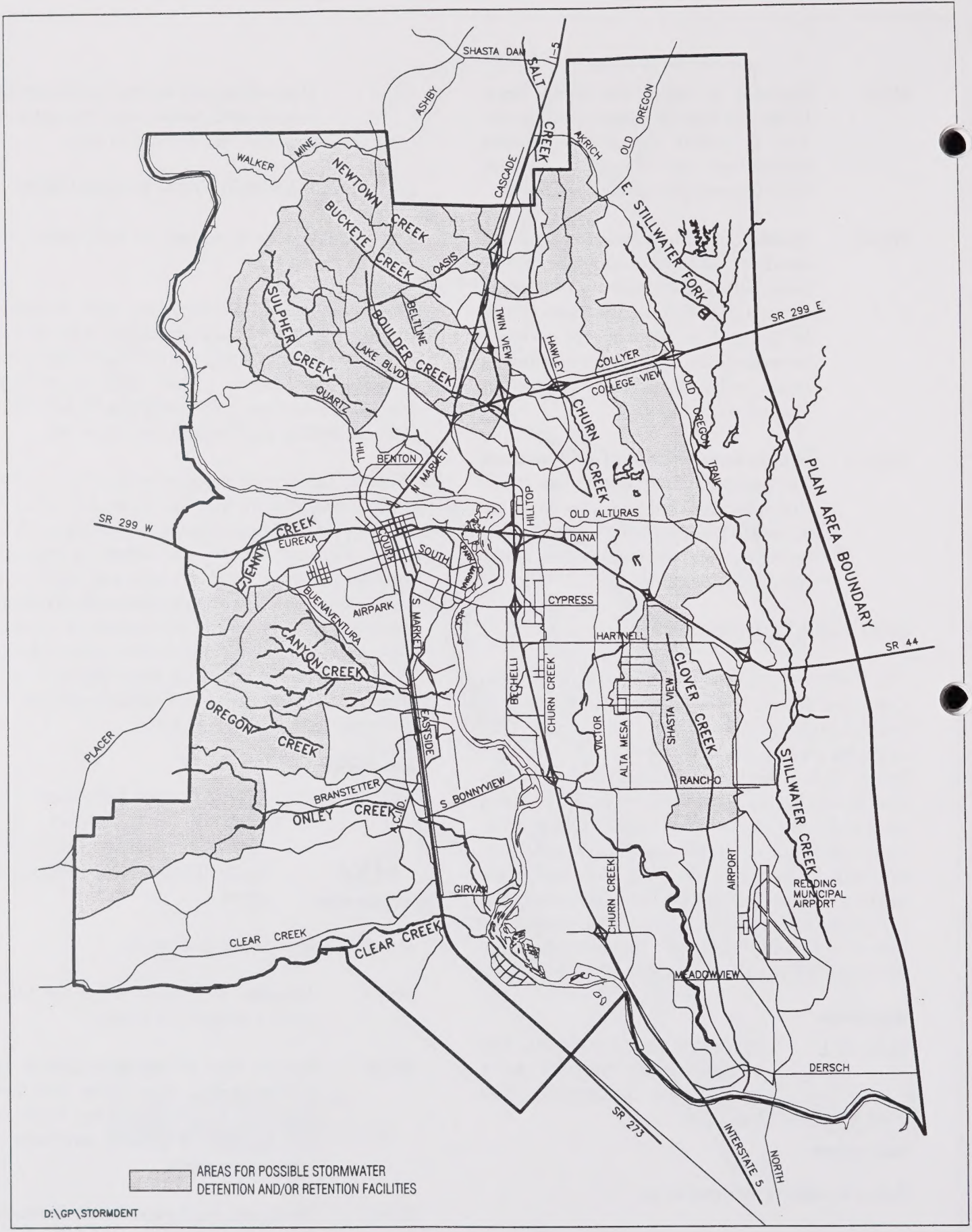


Figure 4-4 Storm Water Detention / Retention Feasibility Areas

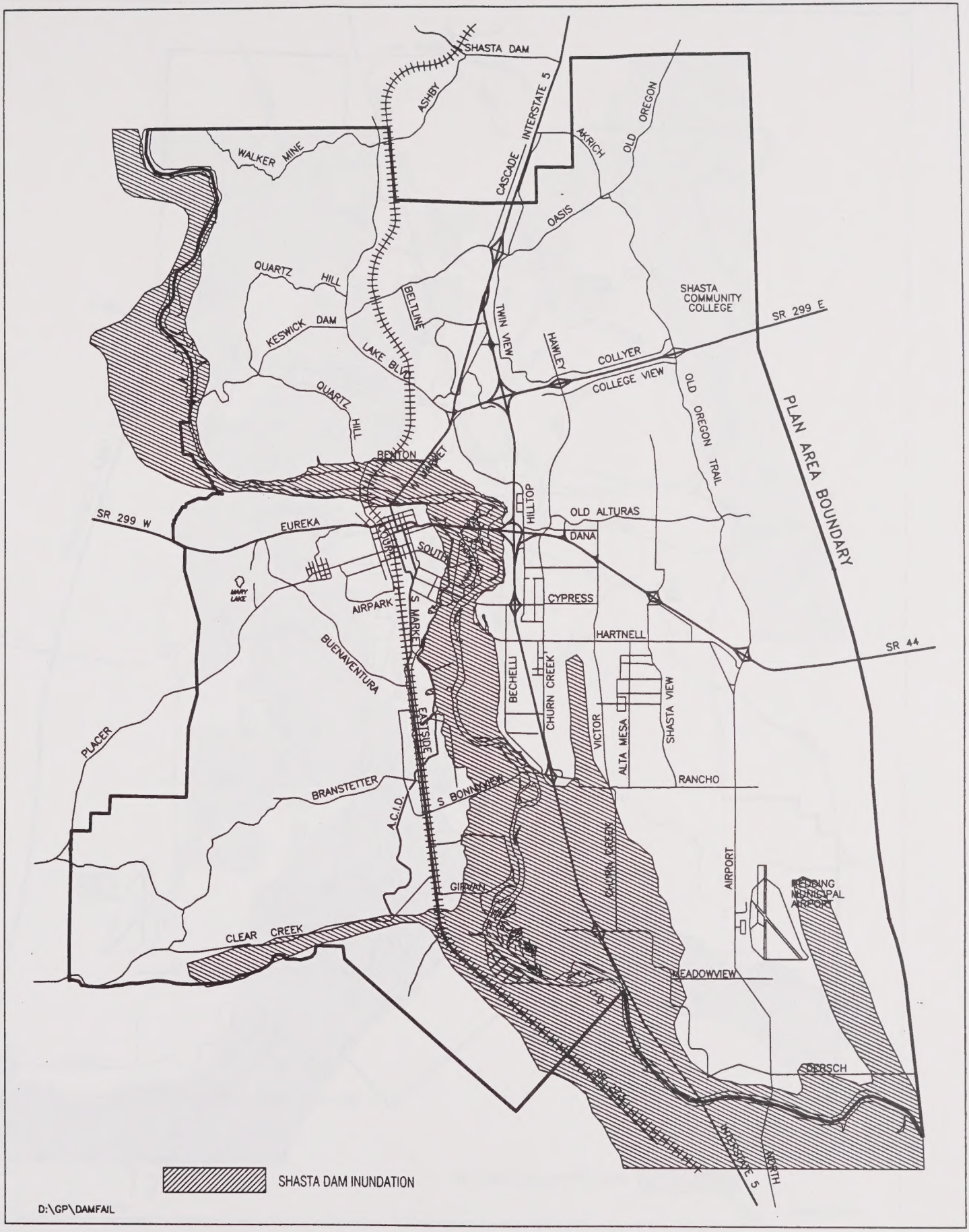


Figure 4-5 Inundation Area For Shasta Dam Failure

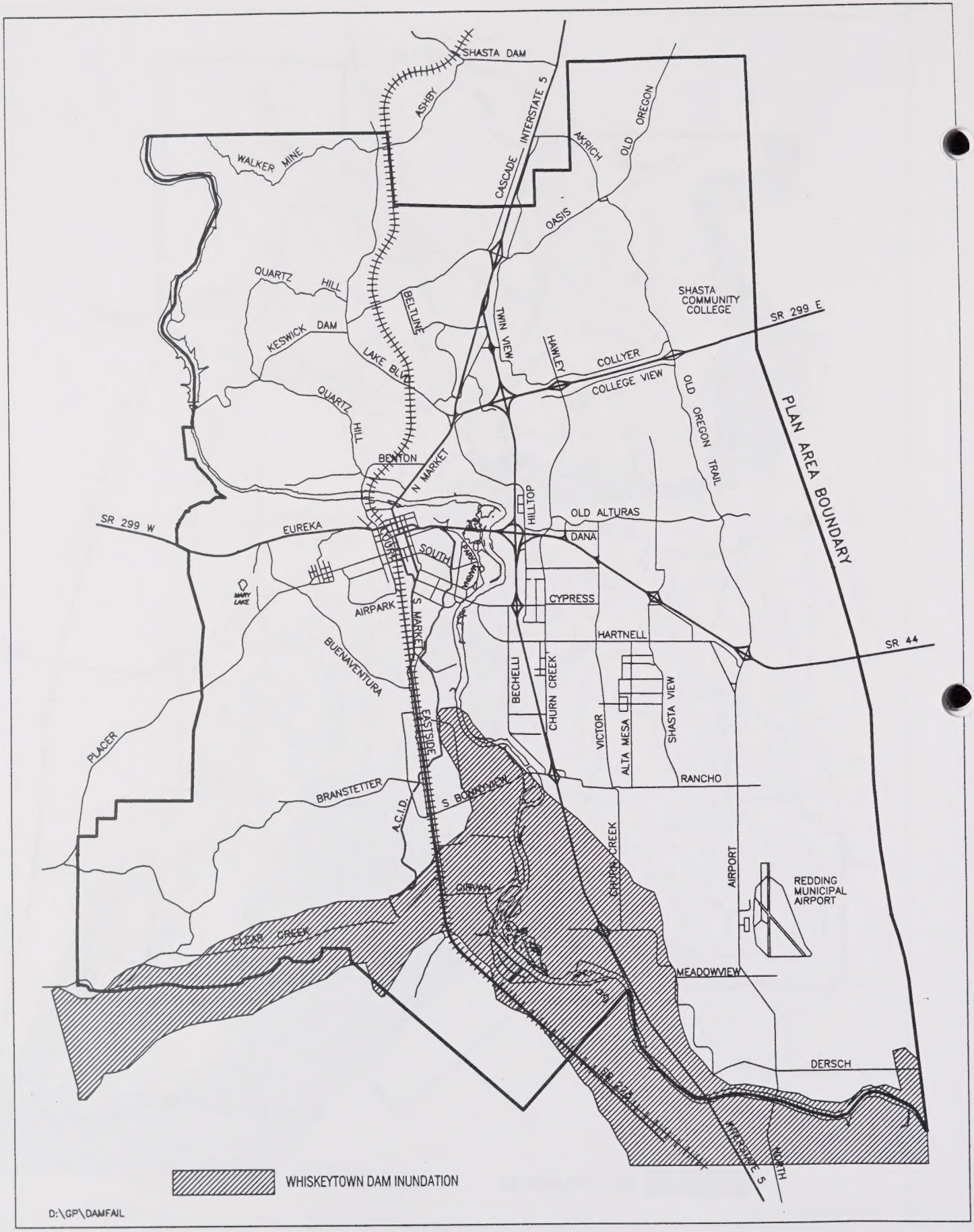


Figure 4-6 Inundation Area For Whiskeytown Dam Failure

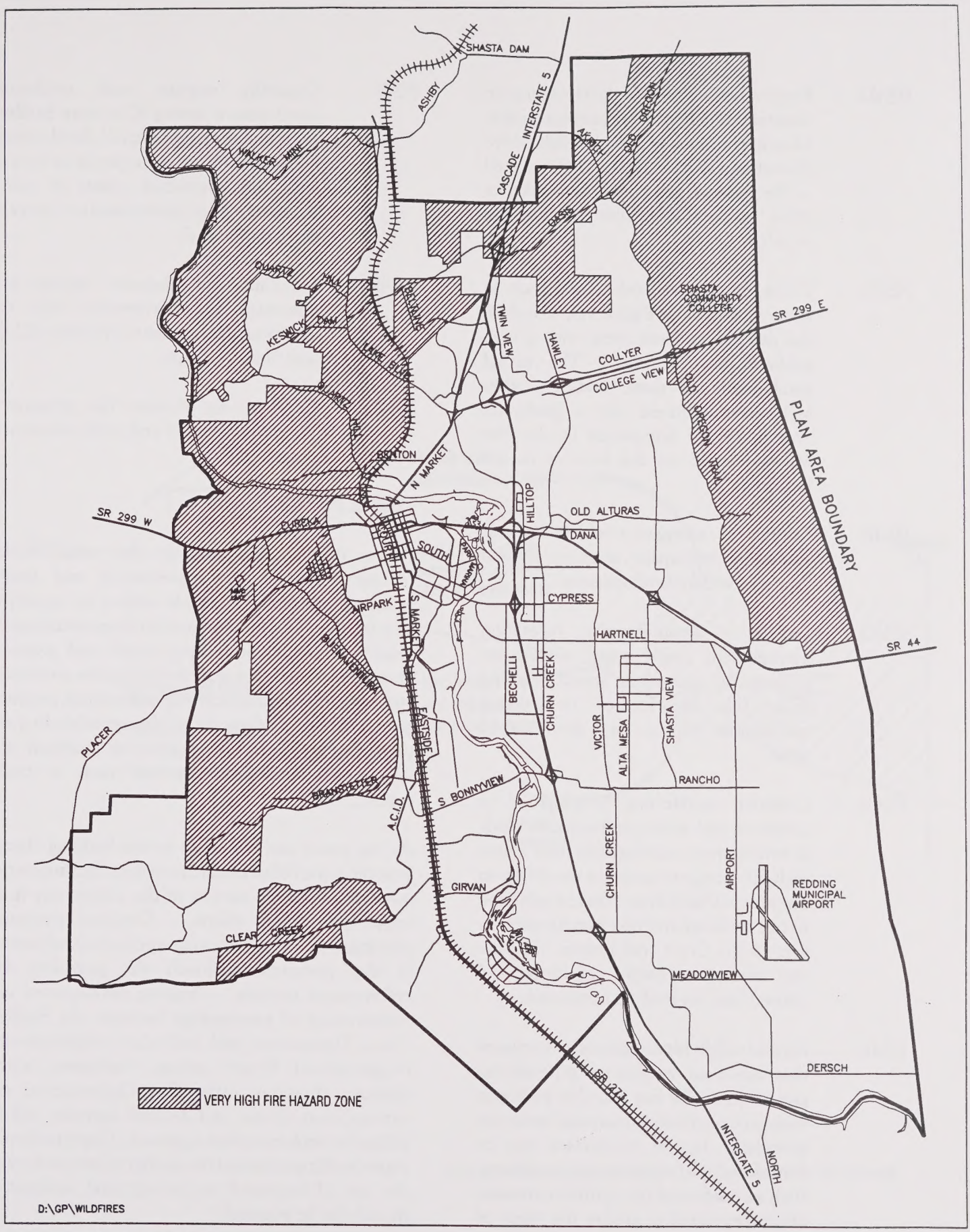


Figure 4-7 Wildland Fire Hazard Areas

HS4D. Require remote hillside developments to maintain sufficient water supplies on site, when appropriate, to provide wildland fire protection. Water supplies may be stored in the form of ponds, storage tanks, or other features acceptable to the Fire Marshal.

HS4E. Utilize appropriate techniques, such as those illustrated in Figure 4-8, to reduce fire damage in those areas with a high wildland fire potential. The actual combination of these and/or other techniques required for a particular project will be determined by the Fire Marshal based on the level of hazard involved.

HS4F. Construct emergency-vehicle access routes to open-space areas at optimal locations within developments.

HS4G. Develop a comprehensive vegetation management and weed abatement program for open-space areas, including those that are located in existing subdivisions and in new development areas.

HS4H. Consider establishing a program to construct and maintain fire-access roads in ravine areas considered to have a very high fire danger to enhance the ability to suppress wildland fires. These roads need not be surfaced and may also function as part of the City's trail system. Erosion and impacts to native vegetation and natural features shall be minimized.

HS4I. Amend subdivision regulations to ensure that cul-de-sac lengths are generally no greater than 600 feet and that sufficient emergency-vehicle turnaround areas are provided. Longer cul-de-sacs may be considered if fire-protection measures, such as residential fire sprinkler systems, are incorporated to ensure the safety of residents and emergency-response personnel.

HS4J. Generally require each residential development having 50 or more dwelling units and each commercial development employing 150 or more people to have at least two connected points of public access as may be determined necessary by the Fire Marshal.

HS4K. Maintain and augment mutual and automatic aid agreements with the California Department of Forestry (CDF) and Shasta County.

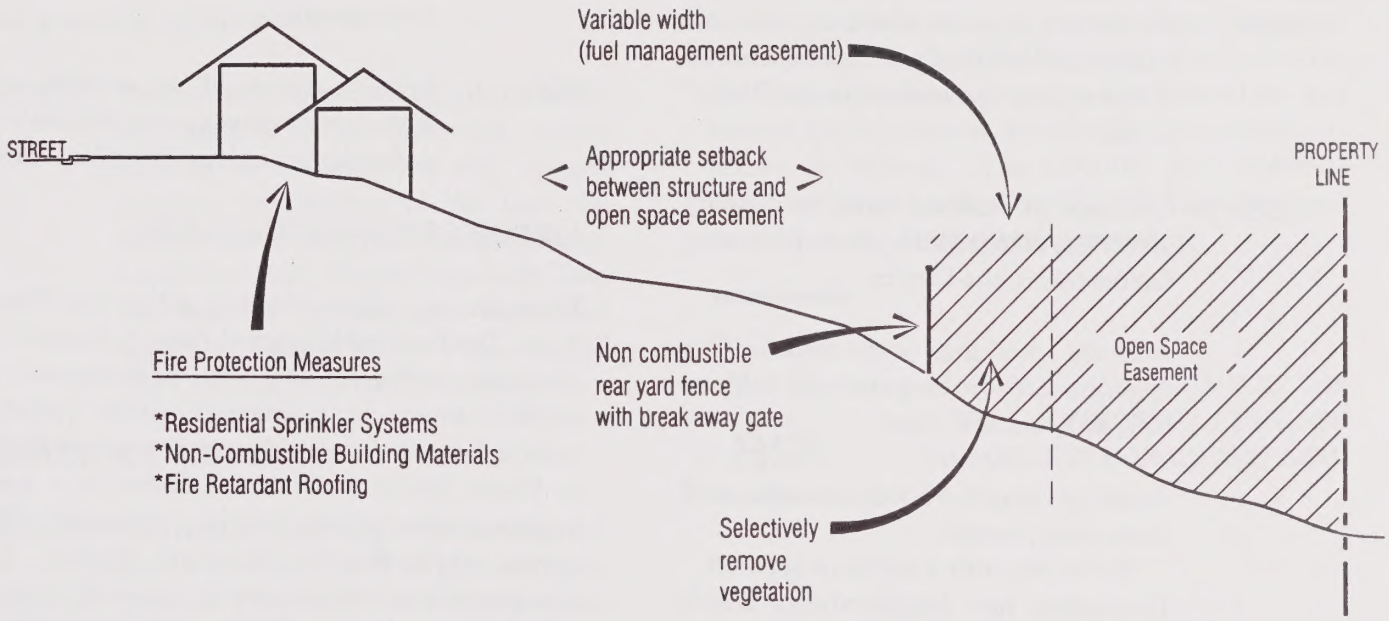
HS4L. Continue to promote fire prevention through education and public-awareness programs.

CRIME PREVENTION

Police officers are among the most visible representatives of City government and largely influence the public's attitude toward the quality of City services. They are responsible for maintaining the quality of life by protecting people and property, promoting community order through crime prevention and broad-based outreach and educational programs geared to both children and adults, apprehending and participating in the prosecution of criminals and regulating noncriminal activities such as traffic control.

As the needs and dynamics within Redding change over time, the Police Department must find innovative ways to involve all sectors of the community in its crime prevention efforts. Community-oriented policing, which emphasizes strong citizen involvement, is the preferred approach for providing law enforcement services. Ongoing development and maintenance of partnerships between the Redding Police Department and individual neighborhoods; Neighborhood Watch groups; businesses; school districts; churches; other City Departments; and various local, State, and Federal agencies will be utilized to implement that approach. Opportunities to improve efficiencies and the quality of service through the use of improved technology and automation should also be pursued.

This section focuses on the prevention of crime through the use of proven programs, improved technology, proper site planning, and project design.



Note: Specific protection measures to be determined by the Fire Marshal.

D:\GP\FIREPROP

Figure 4-8 Fire Protection Measures

GOAL

HS5

PROVIDE A SAFE AND SECURE ENVIRONMENT FOR PEOPLE AND PROPERTY IN THE COMMUNITY.

Policies to achieve this goal are to:

HS5A. Maintain public confidence in the ability of the Police Department to provide quality police services by ensuring a customer-based approach in providing services to the community.

HS5B. Continue a departmentwide expansion of community-oriented policing services and activities that are responsive to citizens' needs.

HS5C. Continue to facilitate broad community involvement in reducing crime-producing factors within the City by:

- Actively working with other City Departments to cooperatively address code enforcement issues.
- Assisting neighborhoods in the civil abatement process.
- Developing new Neighborhood Watch groups and encouraging those groups to participate in community revitalization efforts.
- Expanding the Neighborhood Police Unit Program.
- Expanding educational programs designed to reinforce positive juvenile behavior.
- Establishing low-cost or no-cost, clean-up programs throughout the City.

HS5D. Coordinate law enforcement planning with local, regional, State, and Federal plans.

HS5E. Continue to maintain, train, and equip special response teams for extraordinary emergency incidents.

GOAL

HS6

REDUCE THE POTENTIAL FOR CRIMINAL ACTIVITY AND VANDALISM THROUGH PROPER SITE DESIGN AND LAND USE PLANNING.

Policies to achieve this goal are to:

HS6A. Encourage innovative site planning and design to deter criminal activity in new development.

HS6B. Balance the need to provide safety features with other community goals such as developing a citywide trail system.

AIRPORT-RELATED HAZARDS

There are two airports located within the Planning Area. The Redding Municipal Airport, located in the southeast portion of the City, is designated as a certified airport for commercial airline operations. Benton Airpark, located close to Downtown Redding at Placer Street and Airpark Drive, is a general aviation airport which provides commercial reliever support to the Redding Municipal Airport. Safety issues associated with airports are primarily concerned with hazards related to flight and hazards related to those on the ground within the vicinity of flight operations.

Flight hazards may be:

- Physical (tall structures that could obstruct airspace).
- Visual (glare caused by lights or other bright objects).
- Electronic (uses that interfere with aircraft instruments or communication systems).

Airport operations tend to increase with urban growth. These circumstances elevate the potential for aircraft

accidents because a greater number of operations begin to occur in the presence of increased development within the Airport environs. However, the increased risks and flight hazards listed above can be reduced through a variety of planning methods, including height restrictions, density restrictions, and the avoidance of incompatible land uses.

GOAL

HS7

MINIMIZE THE POTENTIAL FOR AND DAMAGE RESULTING FROM AIRCRAFT ACCIDENTS.

Policy to achieve this goal is to:

HS7A. Prevent development that could endanger the safety of air travelers and persons residing or working in the Airport environs by adhering to the land use policies contained in the Comprehensive Land Use Plans, Airport Approach Zone provisions of the Municipal Code, and applicable Shasta County Airport Land Use Commission (ALUC) resolutions.

EMERGENCY RESPONSE

The administrative draft of the City's *Disaster Response Plan* was published in May 1997. The plan addresses Redding's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. It provides operational checks relating to various emergency situations and identifies the overall responsibilities of the organization and individual departments for protecting life and property and ensuring the well-being of the population.

Matrices within the plan identify the local agencies and private organizations responsible for accomplishing the activities assigned to each functional branch and State and Federal agencies that have capabilities to support local operations. The document also identifies circumstances that necessitate activation of the City's Emergency Operations Center (EOC). The Incident Command System is utilized for on-scene management of field operations. This system provides a standardized organizational structure and terminology/procedures which can be applied in a variety of emergency situations.

Event Specific Plans are included to address:

- Imminent/Actual Flooding in the City of Redding.
- Hazardous Materials Response.
- Major Fire Emergency Response.
- Earthquake Emergency Response.

Shasta County has adopted a similar document and acts as the lead agency for the Standard Emergency Management System (SEMS). Local agencies, such as the Cities of Redding, Anderson, and Shasta Lake and various special districts, are identified as participants within the system. The County's plan addresses necessary coordination among the agencies and establishes standard operating procedures.

GOAL

HS8

MAINTAIN AND ENHANCE THE CITY'S EMERGENCY-RESPONSE CAPABILITIES AND PREPAREDNESS.

Policies to achieve this goal are to:

HS8A. Maintain and periodically update the City's *Disaster Response Plan*.

HS8B. Encourage the involvement of local hospitals, schools, major businesses, utilities, the Red Cross, churches, and other service-providers in emergency-preparedness planning and training.

HS8C. Review periodically, but not less than annually, emergency-service equipment and shelters to ensure that they are ready for immediate operation in the event of an emergency.

HS8D. Require that residences and businesses maintain visible and clearly legible street address numbers to shorten the response time of emergency personnel.

HAZARDOUS MATERIALS

Hazardous materials management includes the identification of and proper transport, use, storage, and disposal of hazardous materials. Hazardous materials include liquids, solids, and gases which, by themselves or when placed in contact with other materials, can result in a threat to life, the environment, and/or property.

The Shasta County Environmental Health Division is the primary agency responsible for overseeing the commercial use and storage of hazardous materials within the Planning Area. In addition to use and storage, hazardous materials are also transported through the Planning Area by both rail and truck. County roads and City streets are used to transport locally generated wastes from the source to the regional highway system.

The City's draft *Disaster Response Plan* (1997) contains a *Hazardous Materials Emergency Response Plan* which is expected to replace the *Hazardous Materials Incident Plan* that was adopted by the City in 1993. The purpose of the plan is to minimize damage to human health, natural systems, and property caused by the release of hazardous materials. Local responsibilities are principally focused on discovery, notification, evaluation, initiation of immediate protective actions, and monitoring of recovery operations. The Fire Department is designated as the Incident Command (IC) authority for all hazardous materials spills and emergencies occurring within the jurisdictional limits of the City, excluding State and Federal lands or property.

GOAL

HS9

REDUCE THE RISK OF PERSONAL INJURY, PROPERTY DAMAGE, AND ENVIRONMENTAL DEGRADATION RESULTING FROM THE USE, TRANSPORT, DISPOSAL, AND RELEASE/DISCHARGE OF HAZARDOUS MATERIALS.

Policies to achieve this goal are to:

HS9A. Require new developments that produce, store, utilize, or dispose of significant amounts of hazardous materials or waste to incorporate appropriate state-of-the-art project designs and building materials to protect employees and adjacent land uses.

HS9B. Continue operation of the City's Household Hazardous Waste Collection Program.

HS9C. Require that soils containing toxic or hazardous substances be remediated to the satisfaction of the agency having jurisdiction prior to the granting of any permits for new development.

HS9D. Promote the routing of vehicles carrying potentially hazardous materials along transportation corridors that reduce the risk of exposure to the public and sensitive environmental areas.

HS9E. Implement the *Hazardous Materials Emergency Response* component of the City's *Disaster Response Plan* in the event of a hazardous material spill, accident, or release within Redding's corporate limits.

HS9F. Encourage the State to regularly monitor and report on the types and amounts of hazardous materials being transported through the Planning Area on State highways and Interstate 5.

HS9G. Encourage the State Department of Health Services and the California Highway Patrol to review permits for radioactive materials on a regular basis and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.

CRITICAL, SENSITIVE, AND HIGH-OCCUPANCY FACILITIES

"Critical facilities" are those whose continued functioning is necessary to maintain public health and safety following a disaster and those whose damage or failure could pose hazards to life and property well beyond their immediate vicinity. Examples include police/fire command and equipment centers, hospitals, emergency shelters, and utilities, including electricity, natural gas, water, and sewage treatment.

"Sensitive facilities" include those used for the manufacture, storage, or sale of hazardous materials, as well as socially significant facilities, such as schools; nursing homes; and housing for the elderly, disabled, or mentally ill.

"High-occupancy facilities" are public or private structures used for housing or the assembly of large groups. Local examples would be the Redding Convention Center and convention facilities associated with hotel development.

GOAL **HS10**

ENSURE THE CONTINUED FUNCTIONING OF ESSENTIAL CRITICAL, SENSITIVE, AND HIGH-OCCUPANCY FACILITIES FOLLOWING A DISASTER.

Policies to achieve this goal are to:

HS10A. Prevent the placement of new critical, sensitive, or high-occupancy facilities within high hazard areas; ensure adequate street access.

HS10B. Encourage owners of existing critical, sensitive, and high-occupancy facilities with significant seismic vulnerabilities to upgrade, relocate, or phase out the facilities as appropriate.

EVACUATION ROUTES

As described within the preceding sections of this element, the Planning Area is subject to a variety of potential hazards. Evacuations may be necessary from time to time, and the routes utilized will often be dependent upon the type, location, and extent of the emergency. Although it is impossible to identify a set of evacuation routes which will apply to all situations, Figures 4-9 and 4-10 identify those routes in, through, and out of the City considered most suitable for mass evacuations. This information should be used only as a guide. Specific routes will be determined and publicized on a case-by-case basis during actual emergencies.

It is anticipated that the final version of the City's *Disaster Response Plan* will contain several proposed evacuation routes correlated to specific events, including regional dam failures, slow-rise flooding, earthquakes, and wildland fire. Adoption of the *Disaster Response Plan*, will occur in conjunction with adoption of the City's updated General Plan. This document and its referenced evacuation routes should be used for both disaster-preparedness training and public-awareness programs.

GOAL **HS11**

PLAN FOR THE ORDERLY EVACUATION OF PEOPLE AND THEIR POSSESSIONS DURING EMERGENCY AND/OR DISASTER SITUATIONS.

Policies to achieve this goal are to::

HS11A. Ensure that emergency personnel receive adequate training in traffic-control and evacuation procedures as required by the City's *Disaster Response Plan*.

HS11B. Publicize evacuation routes contained within the City's *Disaster Response Plan* as a general guide for improving the awareness and preparedness of residents located in high hazard areas.

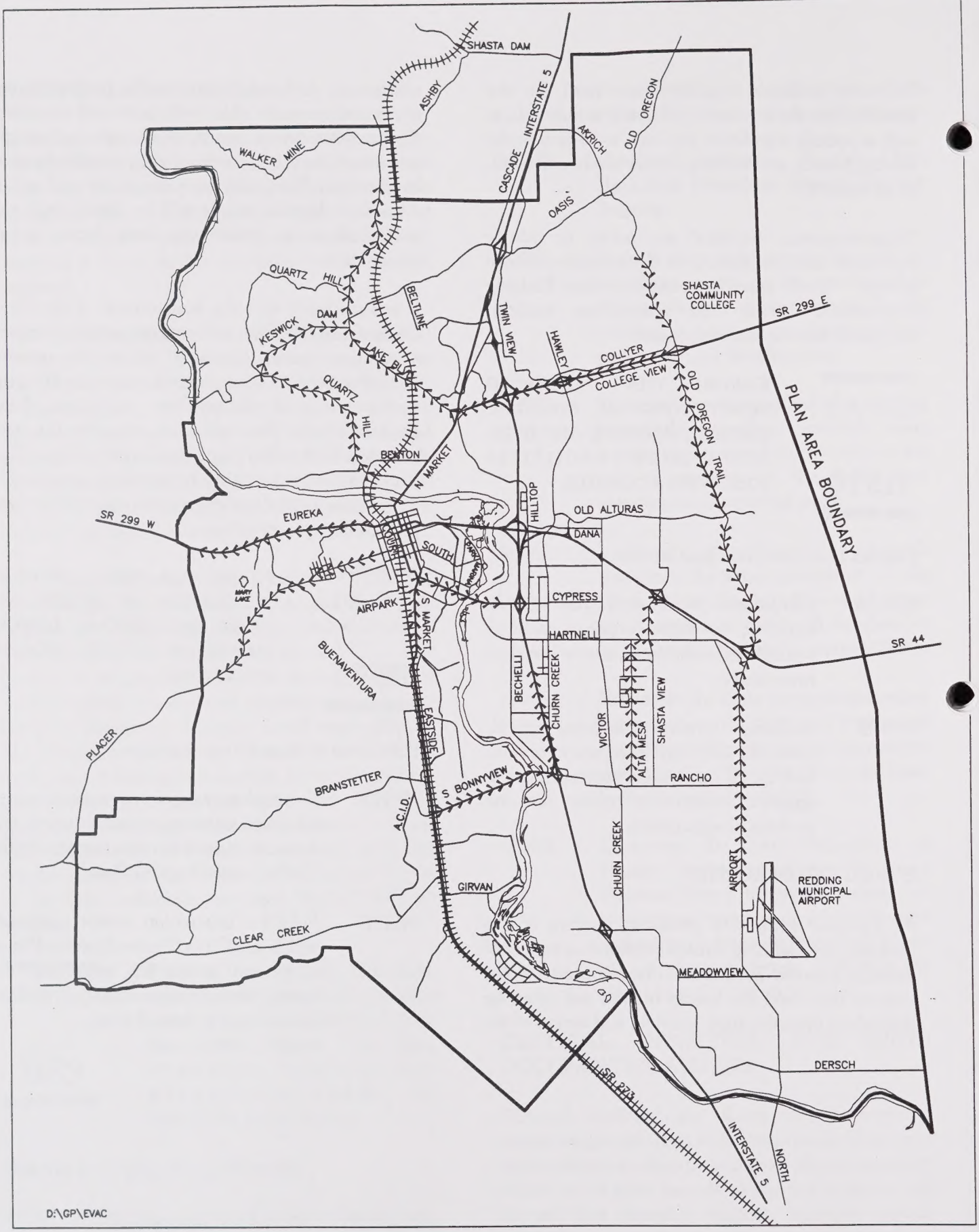


Figure 4-9 Evacuation Routes, Flooding

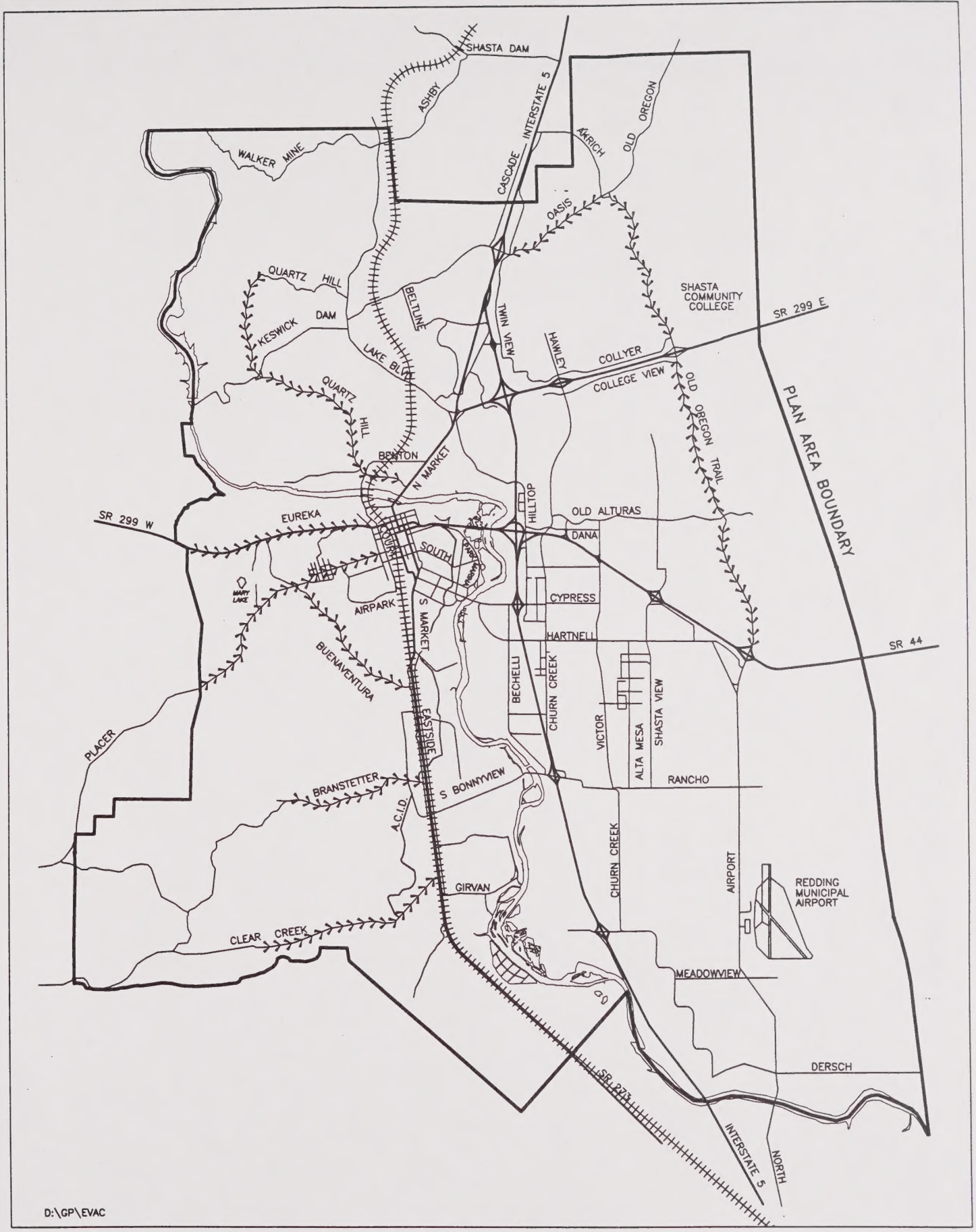


Figure 4-10 Evacuation Routes, Wildland Fires

Noise Element

Noise Element

INTRODUCTION

PURPOSE AND CONTENT

The simplest definition of noise is "unwanted sound." This definition is a subjective one, since people react differently to sounds and even react differently to the same sound. However it is perceived, noise is an important factor in the living and work environment. It can have adverse effects on people, including sleep interference; communication interference; physiological and psychological stress; and in some cases, hearing loss. Noise decreases the enjoyment of the home environment and recreational activities. Therefore, the location of existing or planned noise-sensitive land uses should be considered when placing facilities that generate significant volumes of noise. For purposes of this Noise Element, "noise-sensitive areas and uses" include residential areas, parks, schools, churches, hospitals, and long-term care facilities.

The intent of the Noise Element is to document existing noise conditions and identify areas where potential noise problems exist. This information is to be considered when planning the location and type of development throughout the Planning Area. The primary objective is to protect people from exposure to excessive noise.

Background data and information for this element are contained within Chapter 11 of the City of Redding *General Plan Background Report.*

Specific topics addressed within the Policy Document include:

- Noise Environment and Measurements.
- Transportation Noise Sources.
- Fixed Noise Sources.

AUTHORITY

Pursuant to Government Code Section 65302(f), a general plan shall include:

> *A Noise Element which identifies and appraises noise problems in the community. The Noise Element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, current and projected noise levels for all of the following sources:*
>
> 1. *Highways and freeways.*
> 2. *Primary arterials and major local streets.*
> 3. *Passenger and freight on-line railroad operations and ground rapid transit systems.*
> 4. *Commercial, general aviation, heliport, helistop, and military airport operations; aircraft overflights; jet engine test stands; and all other ground facilities and maintenance functions related to airport operation.*
> 5. *Local industrial plants, including, but not limited to, railroad classification yards.*
> 6. *Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.*
>
> *Noise contours shall be shown for transportation-related noise sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (L_{dn}). Noise contours for non-transportation-related noise must be stated in terms of the hourly energy-equivalent noise level (L_{eq}). The noise contours must be prepared on the basis of noise-monitoring or generally accepted noise-modeling techniques for the various sources identified in paragraphs (1) through (6).*

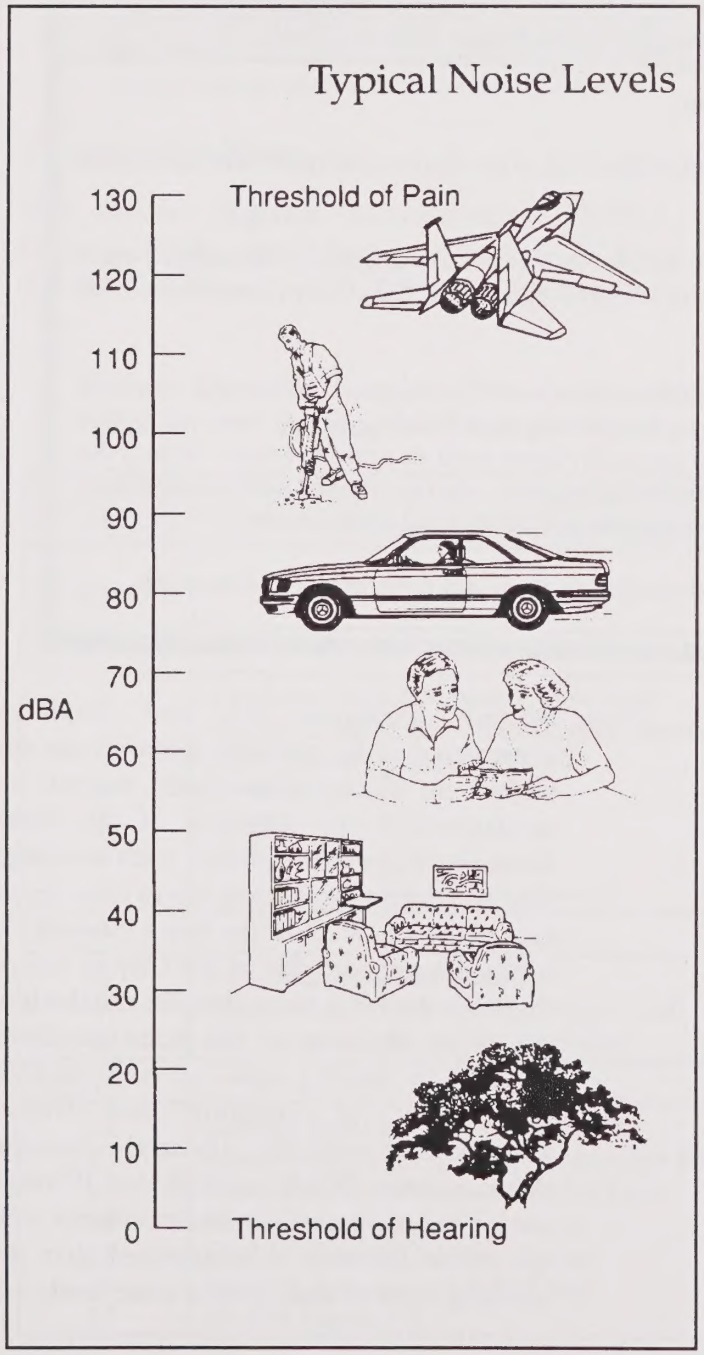
Noise contours are to be used as a guide for establishing a pattern of land uses in the Land Use Element that minimizes the exposure of community residents to excessive noise.

The Noise Element must also include implementation measures or possible solutions that address existing and foreseeable noise problems. The adopted Noise Element shall serve as a guideline for compliance with the State's Noise Insulation Standards.

GOALS AND POLICIES

NOISE ENVIRONMENT AND MEASUREMENTS

Ambient noise, which is the total noise in a given environment, is usually measured with an A-weighted decibel scale (dB^A). However, ambient noise varies over time; therefore, other measurements that give an average noise level for a period of time are used. Such measurements include the energy-equivalent noise level (L_{eq}), the day-night average noise level (L_{dn}), and the community noise equivalent level (CNEL). L_{eq} is an hourly average, while L_{dn} and CNEL are 24-hour weighted averages. All three of the aforementioned measurements were used in the noise survey conducted for the *General Plan Background Report.*



Noise-modeling techniques and noise measurements were used to develop generalized noise contours describing existing conditions for major roadways, railroads, and fixed noise sources (predominantly existing industrial uses) in the Planning Area. The noise-modeling methods closely follow recommendations made by the State Office of Noise Control, supplemented where appropriate by field-measured, noise-level data to account for local conditions. The noise contours are based upon annual average conditions. Because local topography, vegetation, or intervening structures may significantly affect noise exposure at a particular location, the noise contours should not be considered site-specific.

A community noise survey was conducted to document noise exposure in areas containing noise-sensitive land uses. Noise-monitoring sites were selected as representative of typical residential conditions in the City. Community noise-monitoring systems were calibrated with acoustical calibrators in the field prior to use. The systems complied with all pertinent requirements of the American National Standards Institute (ANSI) for Type I sound-level meters.

Generally, noise is generated from two types of sources: transportation sources and fixed sources. These sources are discussed in more detail later in the element.

GOAL N1

PROTECT RESIDENTS FROM THE HARMFUL AND ANNOYING EFFECTS OF EXPOSURE TO EXCESSIVE NOISE.

Policies to achieve this goal are to:

N1A. Monitor and update periodically the community's ambient and fixed noise levels.

N1B. Adopt a noise ordinance to address the following:

- Permitted days and hours for nonemergency construction activities (AM starting time to PM cease of operations).
- Permitted days and hours of operation for noise-generating commercial and industrial outdoor equipment (leaf blowers, parking lot sweepers, etc.) on sites located adjacent to residential areas.
- Regulations pertaining to the use of "jake" brakes within the City limits and excessive noise created by vehicular stereo systems.
- Standards that establish limits for peak noise emissions measured from the property line of the noise-creating use. These standards should be geared primarily toward commercial and industrial uses.
- Regulations that are tied to criteria such as those outlined in Table 5-1 of the Noise Element.
- Guidelines for noise measurement and monitoring activities.
- Enforcement procedures.

N1C. Require acoustical analysis for new development in locations where exterior and/or interior noise levels will likely exceed the City's noise standards to determine appropriate mitigation measures. This analysis must comply with the guidelines identified in Table 5-1.

Table 5-1
Requirements for an Acoustical Analysis

An acoustical analysis prepared pursuant to the Noise Element shall:	
A.	Be the financial responsibility of the applicant.
B.	Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
C.	Estimate the noise levels at affected receivers and the location of existing and projected (20-year) noise contours. Compare those values to the adopted policies of the Noise Element for both interior and exterior exposure levels.
D.	Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to site planning and building design over mitigation measures which require the construction of unusually large walls or noise barriers. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
E.	Estimate noise exposure after the prescribed mitigation measures have been implemented.

Note: Existing dwellings and new dwellings constructed under previous approvals are not subject to City review with respect to satisfaction of the standards of the Noise Element. As a consequence, such dwellings may be constructed in areas where noise levels exceed the standards of the Noise Element. It is not the responsibility of the City to ensure that such dwellings meet the noise standards of the Noise Element or the noise standards imposed by lending agencies such as U.S. Department of Housing and Urban Development (HUD), Federal Housing Administration (FHA), and Cal Vet. If homes are located and constructed in accordance with the Noise Element, it is expected that the resulting exterior and interior noise levels will

conform to the HUD/FHA/Cal Vet noise standards.

N1D. Encourage the use of site planning and building materials/design as primary methods of noise-attenuation.

N1E. Prepare a Noise Attenuation Manual, which illustrates preferred noise mitigation techniques.

N1F. Discourage use of noise barriers and walls constructed exclusively for noise-attenuation purposes, where possible. In instances where noise barriers cannot be avoided, require the use of site planning and building material/design features in conjunction with barriers to mitigate visual impacts and reduce the size of barriers.

Transportation Noise

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-ROAD-77-108) was used to develop L_{dn} contours for all highways and major roadways in the Redding Planning Area. The FHWA Model is the analytical method presently favored for traffic noise prediction by most State and local agencies, including the California Department of Transportation (Caltrans). The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions, and it is generally considered to be accurate within 1.5 dB. To establish the baseline noise conditions, traffic data representing annual average traffic volumes for existing conditions on major roadways was obtained from Caltrans, the City of Redding, and the files of the General Plan's noise consultants. Using these data and the FHWA Model, traffic noise levels as defined by L_{dn} were calculated for existing and projected traffic volumes. Distances from the centerlines of selected roadways to the 60 and 65 dB L_{dn} contours are summarized in Table 5-2. These distances should be treated as estimates, since actual distances may vary due to factors such as road curvature, roadway grade, shielding by local topography or structures, and elevated roadways.

Table 5-2
Existing and Projected Noise Contours For Selected Road Segments

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
I-5					
1	Knighton Road to Churn Creek Road	1,666	773	2,065	959
2	Churn Creek Road to East Cypress Avenue	1,733	804	2,065	959
3	East Cypress Avenue to SR 44	1,683	781	1,968	914
4	SR 44 to SR 299	1,803	837	2,139	993
5	SR 299 to SR 273	1,487	690	1,812	841
6	SR 273 to Oasis Road	1,561	724	1,880	872
7	Oasis Road to Pine Grove Avenue	1,385	643	1,743	809
SR 44					
8	I-5 to Churn Creek Road	268	125	355	165
9	Churn Creek Road to Old Oregon Trail	289	134	455	211
10	Old Oregon Trail to East Boundary	281	131	316	147
SR 273					
11	Canyon Road to Clear Creek Road	284	132	323	150
12	Clear Creek Road to South Bonnyview Road	343	159	367	170
13	South Bonnyview Road to Radio Lane	277	129	351	163
14	Radio Lane to Railroad Avenue	215	100	351	163
15	SR 299 West to Del Mar Avenue	350	163	341	158
16	Del Mar Avenue to SR 299 East	314	146	334	155
17	SR 299 East to I-5	160	74	230	107

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
SR 299					
18	East Boundary to Old Oregon Trail	271	126	284	132
19	Old Oregon Trail to I-5 North	345	160	362	168
20	I-5 South to Tehama	539	250	634	294
SR 299 Tehama					
21	Pine Street to Liberty Street	230	107	234	109
SR 299 Shasta					
22	Liberty Street to Pine Street	221	102	234	109
SR 299 Eureka Way					
23	Market Street to Court Street	218	101	251	116
24	Court Street to Buenaventura	250	116	280	130
25	Buenaventura to West Boundary	337	157	367	170
Airport Road					
26	SR 44 to Hartnell Avenue	182	84	220	102
27	Hartnell Avenue to Rancho Road	163	76	242	112
28	Rancho Road to Meadow View Drive	142	66	214	99
29	Meadow View Drive to Fig Tree Lane	142	66	191	89
30	Fig Tree Lane to Dersh Road	142	66	189	88
Alta Mesa Drive					
31	Galaxy to Hartnell Avenue	52	24	75	35
Angelo Avenue					
32	Market Street to Parkview Avenue	66	31	61	28
Athens Avenue					
33	Cypress Avenue to Locust Street	118	55	118	55
34	Locust Street to South Street	83	38	57	26
Bechelli Lane					
35	Hemsted to Grove Street	66	31	69	32
36	Grove Street to East Cypress Avenue	66	31	69	32
37	East Cypress Avenue to Hartnell Avenue	112	52	105	49
38	Hartnell Avenue to 3rd Street	137	64	125	58
39	3rd Street to Loma Vista Drive	131	61	105	49
40	Loma Vista Drive to South Bonnyview Road	90	42	91	42
Benton Drive					
41	North Market Street to Quartz Hill Road	47	22	163	76
Browning Street					
42	Hilltop Drive to East End	49	23	91	42
Buenaventura Boulevard					
43	Eureka Way to Placer Street	66	31	81	38
44	Placer Street to Canyon Creek Road	47	22	95	44
45	Canyon Creek Road to Railroad Avenue	52	24	75	35
46	Railroad Avenue to Market Street	125	58	152	71
Butte Street					
47	Continental Street to Sequoia Avenue	79	37	93	43
48	Sequoia Avenue to Auditorium Drive	85	39	108	50

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
California Street					
49	Riverside Drive to Trinity Street	57	26	68	31
50	Trinity Street to Eureka Way	118	55	68	31
51	Eureka Way to Tehama Street	98	45	68	31
Continental Street					
52	Placer Street to Butte Street	62	29	72	33
53	Butte Street to Trinity Street	47	22	59	27
Canyon Road					
54	West City Limits to SR 273	90	42	100	46
Churn Creek Road					
55	Rancho Road to Victor Avenue	83	38	98	45
56	Victor Avenue to South Bonnyview Road	87	40	93	43
57	South Bonnyview Road to Loma Vista Drive	101	47	121	56
58	Loma Vista Drive to Shirley Lane	131	61	144	67
59	Shirley Lane to Hartnell Avenue	166	77	156	72
60	Hartnell Avenue to East Cypress Avenue	166	77	139	65
61	Mistletoe Lane to Dana Drive	183	85	188	87
62	Dana Drive to Old Alturas Road	131	61	155	72
63	Old Alturas Road to Canby Road	105	49	125	58
64	Canby Road to Palacio Drive	105	49	137	64
65	Palacio Drive to College View Drive	105	49	137	64
66	College View Drive to Collyer Drive	87	40	143	67
Clear Creek Road					
67	South Market Street to ACID Canal	57	26	49	23
College View Drive					
68	Churn Creek Road to Shasta View Drive	47	22	58	27
Court Street					
69	Schley Street to South Street	118	55	133	62
70	South Street to Placer Street	118	55	112	52
71	Placer Street to Shasta Street	137	64	131	61
72	Shasta Street to Eureka Way	112	52	131	61
Cypress Avenue and East Cypress Avenue					
73	Market Street to Akard Avenue	177	82	203	94
74	Akard Avenue to Athens Avenue	208	97	205	95
75	Athens Avenue to Hartnell Avenue	260	121	264	123
76	Hartnell Avenue to Bechelli Lane	218	101	198	92
77	Bechelli Lane to Southbound I-5 ramps	255	119	226	105
78	Southbound I-5 ramps to Northbound ramp	255	119	237	110
79	Northbound I-5 ramp to Hilltop Drive	208	97	246	114
80	Hilltop Drive to Larkspur Lane	203	94	198	92
81	Larkspur Lane to Churn Creek Road	161	75	166	77
82	Churn Creek Road to Victor Avenue	66	31	143	67

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
Dana Drive					
83	Hilltop Drive to Canby Road	118	55	143	67
84	Canby Road to Churn Creek Road	131	61	118	55
85	Churn Creek Road to Friendly Lane	131	61	160	79
86	Friendly Lane to Bradford Way	75	35	122	56
87	Bradford Way to Victor Avenue	66	31	98	45
East Street					
88	Cypress Avenue to South Street	73	34	77	36
89	South Street to Placer Street	83	38	112	52
90	Placer Street to Tehama Street	90	42	105	49
91	Tehama Street to Shasta Street	105	49	98	46
Eastside Road					
92	Wyndham Lane to Breslauer Lane	54	25	27	12
93	Breslauer Lane to Radio Lane	73	34	59	27
94	Radio Lane to East Bonnyview Road	60	28	24	11
95	East Bonnyview Road to South Bonnyview Road	47	22	23	10
96	South Bonnyview Road to Girvan Road	66	31	43	20
Freebridge Street					
97	Parkview Avenue to Weldon Street	47	22	23	10
Girvan Road					
98	Eastside Road to Creekside Drive	57	26	69	32
Hartnell Avenue					
99	East Cypress Avenue to Parkview Avenue	143	67	134	62
100	Parkview Avenue to Bechelli Lane	118	55	143	67
101	Bechelli Lane to Churn Creek Road	155	72	146	68
102	Churn Creek Road to Victor Avenue	183	85	152	71
103	Victor Avenue to Shasta View Drive	137	64	148	69
104	Shasta View Drive to Goodwater Avenue	112	52	103	48
105	Goodwater Avenue to Argyle Avenue	83	38	91	42
106	Argyle Avenue to Airport Road	47	22	60	28
Hilltop Drive					
107	East Lake Boulevard to Peppertree Lane	118	55	161	75
108	Peppertree Lane to Browning Street	125	58	170	79
109	Browning Street to East Palisades Avenue	149	69	155	72
110	East Palisades Avenue to Dana Drive	161	75	172	80
111	Dana Drive to SR 44 Eastbound ramps	183	85	201	93
112	SR 44 Eastbound ramps to I-5 Off-ramp	172	80	193	90
113	I-5 Off-ramp to Mistletoe Lane	172	80	177	82
114	Mistletoe Lane to Industrial Street	143	67	115	53
115	Industrial Street to Cypress Avenue	137	64	107	50
116	Cypress Avenue to Maraglia Avenue	105	49	105	49

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
Lake and East Lake Boulevard					
117	North City Limits to Oasis Road	112	52	121	56
118	Oasis Road to Keswick Dam Road	118	55	131	61
119	Keswick Dam Road to Panorama Drive	143	67	135	63
120	Panorama Drive to Clay Street	149	69	152	71
121	Clay Street to North Point Drive	166	77	177	82
122	North Point Drive to Masonic Avenue	172	80	177	82
123	Masonic Avenue to North Market Street	232	108	245	114
124	North Market Street to Hilltop Drive	218	101	219	101
125	Hilltop Drive to Southbound I-5 ramp	166	77	165	77
Locust Street					
126	East Street to Athens Avenue	47	22	44	20
127	Athens Avenue to Park Marina Drive	57	26	62	29
Mistletoe Lane					
128	Hilltop Drive to Churn Creek Road	90	42	115	53
129	Churn Creek Road to Victor Avenue	66	31	72	33
North Court Street					
130	Eureka Way to Quartz Hill Road	N/A	N/A	N/A	N/A
Oasis Road					
131	Lake Boulevard to Beltline Road	57	26	64	30
132	Beltline Road to Cascade Boulevard	47	22	68	31
133	Cascade Boulevard to Twin View Boulevard	75	35	152	71
134	Twin View Boulevard to Gold Hills Drive	66	31	143	67
135	Gold Hills Drive to Old Oregon Trail	57	26	100	46
Old Alturas Road					
136	Churn Creek Road to Friendly Lane	83	38	117	54
137	Friendly Lane to Browning Street	66	31	112	52
138	Browning Street to Victor Avenue	112	52	112	52
139	Victor Avenue to Shasta View Drive	105	49	112	52
140	Shasta View Drive to Old Oregon Trail	66	31	81	38
141	Old Oregon Trail to East Planning Area Limits	53	25	57	26
Old Oregon Trail					
142	SR 44 to Old Highway 44	87	41	151	70
143	Old Highway 44 to Old Alturas Road	62	29	92	43
144	Old Alturas Road to College View Drive	62	29	81	38
145	College View Drive to Collyer Drive	118	55	131	61
146	Collyer Drive to Oasis Road	66	31	85	39
147	Oasis Road to Bear Mountain Road	83	38	98	45
Park Marina Drive					
148	Auditorium Drive to SR 299E ramps	90	42	107	50
149	SR 299E Eastbound ramps to Athens Avenue	83	38	92	43
150	Athens Avenue to South Street	125	58	92	43
151	South Street to Locust Street	118	55	82	38
152	Locust Street to Cypress Avenue	66	31	57	26

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
Parkview Avenue					
153	South Market Street to Akard Avenue	101	47	83	38
154	Akard Avenue to Freebridge Street	75	35	75	35
Placer Street					
155	West City Limits to Buenaventura Boulevard	66	31	65	30
156	Buenaventura Boulevard to Pleasant Street	131	61	65	30
157	Pleasant Street to Airpark Road	137	64	134	62
158	Airpark Road to Court Street	143	67	172	80
159	Court Street to California Street	118	55	177	82
160	California Street to Pine Street	112	52	177	82
161	Pine Street to East Street	66	31	115	53
162	East Street to Sequoia Street	66	31	119	55
Quartz Hill Road					
163	Harlan Drive to Benton Drive	66	31	112	52
164	Benton Drive to North Market Street	90	42	72	33
Radio Lane					
165	East Bonnyview Road to South Bonnyview Road	47	22	53	25
Railroad Avenue					
166	Canyon Creek Road to Schley Avenue	87	40	122	57
Rancho Road					
167	Churn Creek Road to Alta Mesa Drive	75	35	95	44
168	Alta Mesa Drive to Airport Road	57	26	76	35
Shasta View Drive					
169	Hartnell Avenue to SR 44	83	38	119	55
170	SR 44 to Old Alturas Road	49	23	70	33
South Bonnyview Road					
171	South Market Street to Eastside Road	183	85	169	79
172	Eastside Road to Bechelli Lane	149	69	193	90
173	Bechelli Lane to Southbound I-5 ramp	149	69	183	85
174	Southbound I-5 ramp to Northbound I-5 ramp	125	58	172	80
175	Northbound I-5 ramp to Churn Creek Road	125	58	155	72
South Street					
176	Court Street to California Street	118	55	152	70
177	California Street to Market Street	98	45	137	64
178	Market Street to Pine Street	118	55	137	64
179	Pine Street to East Street	83	38	101	47
180	East Street to Athens Avenue	66	31	59	27
181	Athens Avenue to Park Marina Drive	52	24	63	29
Twin View Boulevard					
182	North Market Street to Caterpillar Road	75	35	96	44
183	Caterpillar Road to Constitution Way	90	42	121	56

NOISE CONTOUR DATA Distance (Feet) from Center of Roadway to L_{dn} Contours					
Segment	Description	Existing		Projected	
		60 dB	65 dB	60 dB	65 dB
Victor Avenue					
184	Churn Creek Road to Hartnell Avenue	66	31	112	52
185	Hartnell Avenue to East Cypress Avenue	66	31	115	53
186	East Cypress Avenue to SR 44 Eastbound ramp	90	42	128	59
187	SR 44 Eastbound ramp to SR 44 Westbound ramp	83	38	142	66
188	SR 44 Westbound ramp to Dana Drive	75	35	128	59
189	Dana Drive to Old Alturas Road	57	26	128	59
Westside Road					
190	Kenyon Road to Breslauer Lane	49	23	0	0
191	Breslauer Lane to Buenaventura Boulevard	51	24	0	0
Sources: California Department of Transportation (Caltrans) and Brown-Buntin Associates.					

Rail

Railroad activity in the Planning Area is limited primarily to the Union Pacific (UP) north/south mainline track, which runs generally parallel to State Route 273 until just south of Lake Redding. UP officials reported that there are 52 freight train operations per day on the mainline track. This track is also used by Amtrak for its Coast Starlight train run. To determine the contribution of UP railroad operations to the area noise environment, noise measurements were conducted at three sites on January 11-12, 1996, and April 9-10, 1996. Based on the data from these measurements, the L_{dn} values were calculated, and the 60 and 65 dB Ldn noise-level contours were plotted. The results are shown on Table 5-3.

readings at three locations with such unique characteristics is to provide a general idea about the location of the referenced contours under different topographical circumstances. This data should be used as a guide for determining the approximate distance to the 60 dB and 65 dB contours at other locations with similar characteristics. However, preparation of a site-specific acoustical analysis is highly recommended for projects likely to fall within projected rail contours.

Airports

There are two airports within the Planning Area. The Redding Municipal Airport is a commercial service primary airport. In 1993-94, there were approximately 112,500 total aircraft operations. Existing noise impacts for the Airport were identified in the *Redding Municipal Airport Master Plan Report Update*, August 1995. Currently, the 60 dB CNEL noise contour does not encroach on existing residential areas. Figures 5-1 and 5-2 show existing and projected noise contours for

Table 5-3
Approximate Distances to Union Pacific Railroad Noise Contours

Measurement Site	L_{dn} at Distance from RR Track of:		Distance to L_{dn} Contour (feet)	
	50 feet	100 feet	60 dB	65 dB
3210 Veda Street	72.1 dB	67.0 dB	321	149
West end of Clay Street	81.4 dB	76.9 dB	1,339	621
Caldwell Park	72.2 dB	67.7 dB	326	151
Source: Brown-Buntin Associates, January 11-12, 1996, and April 9-10, 1996				

The monitoring site at Veda Street is located adjacent to the tracks. The site at the end of Clay Street is located above the tracks, and the site at Caldwell Park is located below the tracks. The purpose of taking the

the Redding Municipal Airport. Benton Airpark is a basic utility airport used primarily by single-engine and small twin-engine airplanes. There are approximately 32,000 annual aircraft operations currently. The *Comprehensive Land Use Plan* for Benton Airpark adopted in October 1993, indicates that the 60 dB CNEL noise contour may intrude into residential areas north and south of the Airpark when operations reach a level of 75,000 to 100,000. This level is unlikely to be reached given hangar, tie-down, and other capacity limitations at the Airpark. A noise measurement conducted at the south end of the Airpark produced a measured CNEL of approximately 57 dB. Figure 5-3 depicts projected noise contours based on 90,000 operations a year.

GOAL N2

PROTECT RESIDENTS FROM EXPOSURE TO EXCESSIVE TRANSPORTATION-RELATED NOISE.

Policies to achieve this goal are to:

N2A. Update existing and projected noise contours periodically for all transportation noise sources.

N2B. Prevent development of new projects which contain noise-sensitive land uses in areas exposed to existing or projected levels of noise from transportation sources which exceed the levels specified in Table 5-4, unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in that table.

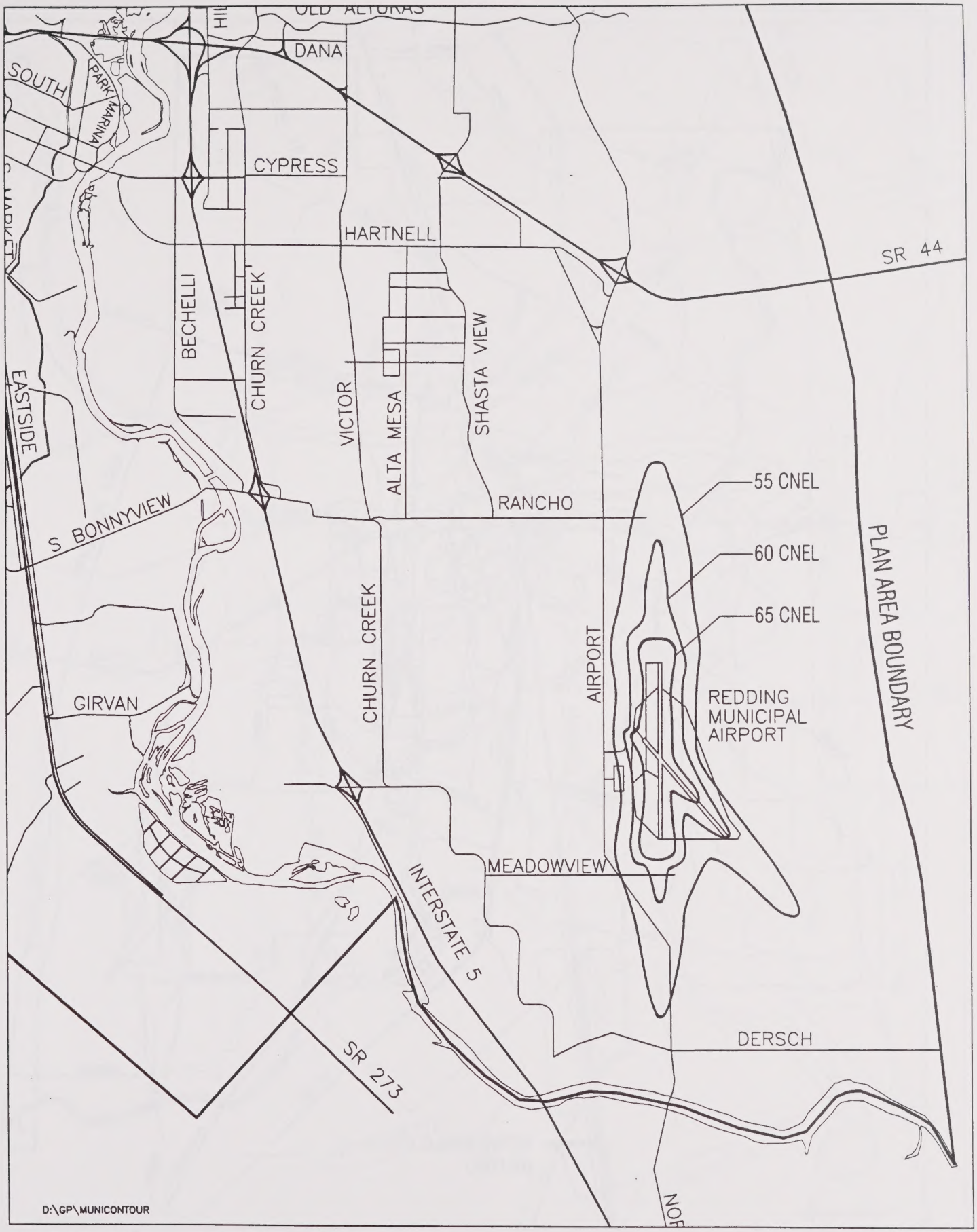


Figure 5-1 Redding Municipal Airport Existing Noise Contours

Figure 5-2 Future Noise Contour Municipal Airport

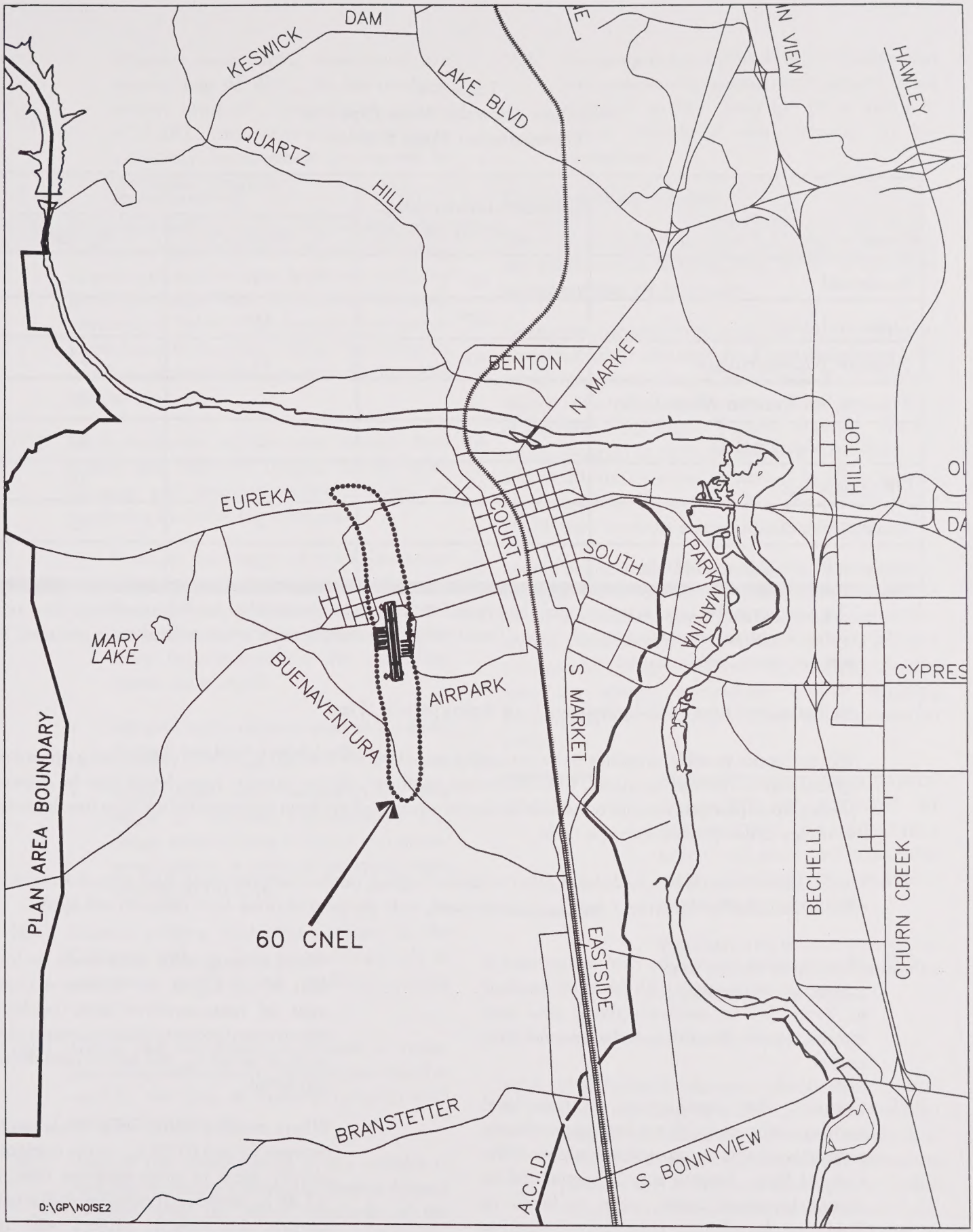


Figure 5-3 Future Noise Contour Benton Airpark

Table 5-4
Maximum Allowable Noise Exposure
Transportation Noise Sources

Land Use	Outdoor Activity Areas[1] L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

1 The exterior noise-level standard shall be applied to the outdoor activity area of the receiving land use. Outdoor activity areas are normally located near or adjacent to the main structure and often occupied by porches, patios, balconies, etc.

2 As determined for a typical worst-case hour during periods of use.

3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less, using a practical application of the best-available, noise-reduction measures, higher exterior noise levels may be allowed provided that practical exterior noise-level reduction measures have been implemented and that interior noise levels are in compliance with this table.

4 In the case of hotel/motel facilities or other transient lodging, outdoor activity areas, such as pool areas, may not be included in the project design. In these cases, only the interior noise-level criterion will apply.

N2C. Mitigate noise created by new transportation noise sources consistent with the levels specified in Table 5-4 in outdoor-activity areas and interior spaces of existing noise-sensitive land uses.

N2D. Consider the significance of noise-level increases associated with roadway-improvement projects needed to accommodate buildout of the General Plan. Since it may be impractical to reduce increased traffic noise to levels in Table 5-4, the following criteria may be used as a test of significance for roadway-improvement projects:

- Where existing traffic noise levels are less than 60 dB L_{dn} in the outdoor-activity areas of noise-sensitive uses, roadway improvement projects which increase noise levels to 60 dB L_{dn} will not be considered significant.
- Where existing traffic noise levels range between 60 and 65 dB L_{dn} in the outdoor-activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in noise levels due to a roadway-improvement project will be considered significant.

- Where existing traffic noise levels are greater than 65 dB L_{dn} in the outdoor-activity areas of noise-sensitive uses, a +1.5 dB L_{dn} increase in noise levels due to a roadway- improvement project will be considered significant.

N2E. Require acoustical analysis for noise-sensitive land uses proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 5-4 or the performance standards of Table 5-5 to determine mitigation for inclusion in the project design. Single-family dwellings on existing lots are excluded from this review.

N2F. Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies:

- Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.
- Mitigate traffic volumes and vehicle speed through residential neighborhoods.
- Work closely with Caltrans in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.

N2G. Enforce existing applicable sections of the California Vehicle Code related to vehicle or equipment mufflers and modified exhaust systems.

N2H. Ensure that any municipal vehicles or noise-generating mechanical equipment purchased or used by the City of Redding complies with acceptable standards.

N2I. Require that development in the vicinity of Redding Municipal Airport and Benton Airpark complies with the noise standards of the Comprehensive Land Use Plan for each facility.

N2J. Encourage railroad officials to install mitigation features whenever possible, and instruct railroad engineers to limit their use of air horns to reduce rail-related noise impacts on the community.

Nontransportation Noise

Activities at industrial, light industrial, commercial, and public-service facilities often involve processes or equipment that produce noise.

Noise measurements were conducted at three sites that contained fixed noise sources. These include sand and gravel operations along Clear Creek Road, lumber-related industries along Bonnyview Road, and the City of Redding Solid Waste Transfer Station. The L_{eq} values obtained at all three sites were between 50 dB and 60 dB, and no measurements of 60 dB, or greater, were recorded. Figures 5-4, 5-5, and 5-6 depict the 50 dB noise contours around the three sites.

Some existing residential uses are located near existing industrial uses on Moore Road and within the Mountain Lakes Industrial Park. Additional residential and industrial development within these areas will have to be carefully designed to ensure that future industrial uses can operate successfully without exposing surrounding noise-sensitive land uses to excessive noise levels.

GOAL

N3

PROTECT THE ECONOMIC BASE OF THE CITY OF REDDING BY PREVENTING INCOMPATIBLE LAND USES FROM ENCROACHING UPON EXISTING OR PLANNED NOISE-PRODUCING USES.

PREVENT THE INTRODUCTION OF NEW FIXED NOISE SOURCES IN NOISE-SENSITIVE AREAS.

Policies to achieve this goal are to:

N3A. Prohibit the development of noise-sensitive uses where the noise level due to nontransportation sources will exceed the noise-level standards of Table 5-5 as measured immediately within the property line of the new development, unless effective noise-mitigation measures have been incorporated into the development design to achieve the standards specified in Table 5-5.

Figure 5-4 Noise Contours Sand And Gravel Operations

Figure 5-5 Noise Contours East Bonnyview Road Lumber Industries

N
W E

October 3, 2000

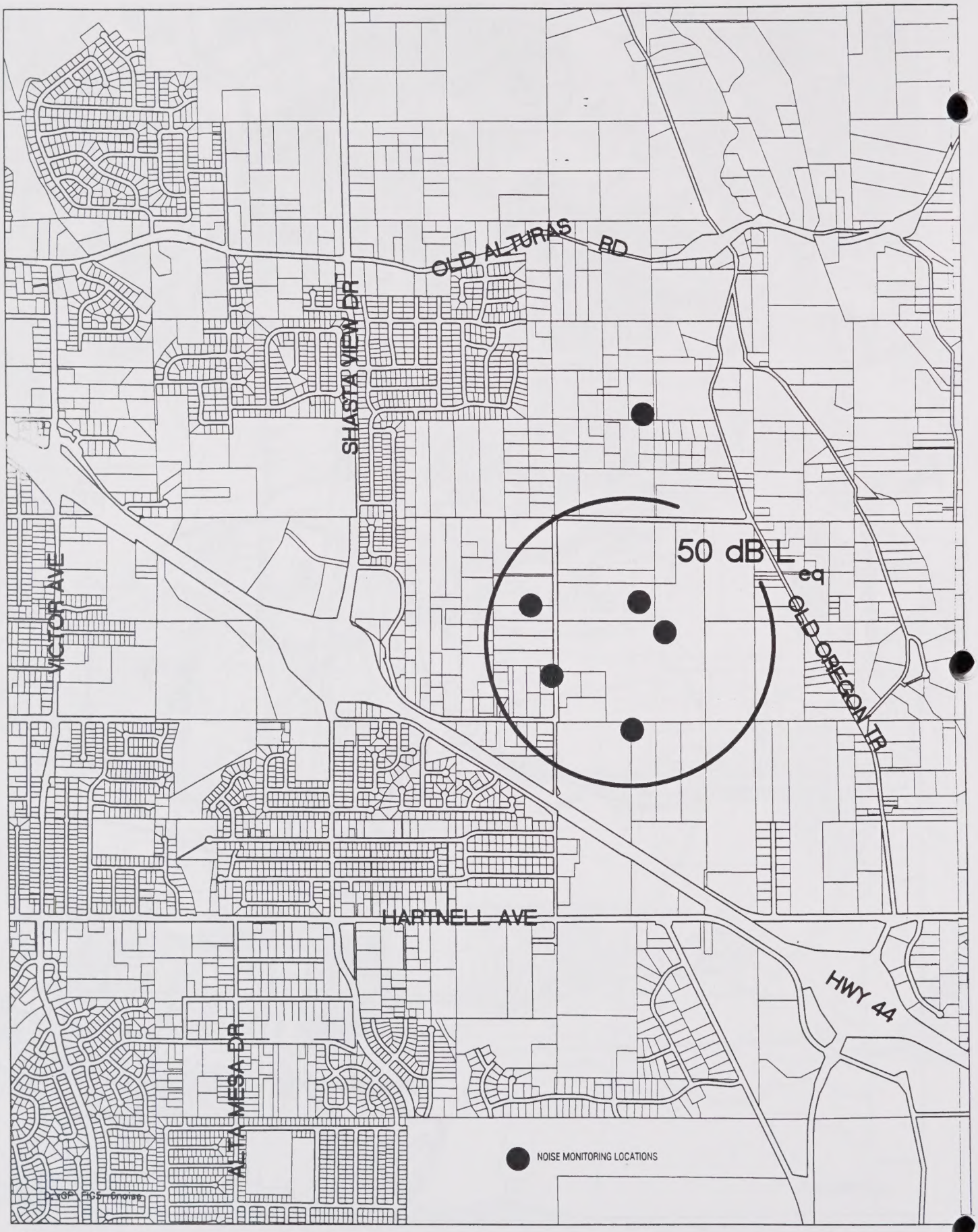


Figure 5-6 Noise Contours Solid Waste Transfer Station

N3B. Mitigate noise created by new proposed nontransportation sources consistent with the noise-level standards of Table 5-5 as measured immediately within the property line of lands designated for noise-sensitive land uses. Noise-level standards for non-noise-sensitive uses will generally be 10 dB higher before mitigation is required.

N3C. Require acoustical analysis of new nonresidential land uses and the expansion of existing nonresidential land uses if likely to produce noise levels exceeding the performance standards of Table 5-5 within the property line of existing or planned noise-sensitive uses.

Table 5-5
Noise Level Performance Standards for New Projects Affected By or Including Nontransportation Noise Sources

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	45

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises (e.g., humming sounds, outdoor speaker systems). These noise-level standards do not apply for residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). The City can impose noise-level standards which are more restrictive than those specified above based upon determination of existing low ambient noise levels.

Industrial, light industrial, commercial, and public-service facilities which have the potential for producing objectionable noise levels at nearby noise-sensitive uses are dispersed throughout the City. Fixed noise sources which are typically of concern include, but are not limited to, the following:

HVAC Systems	Cooling Towers/Evaporative Condensers
Pump Stations	Lift Stations
Emergency Generators	Boilers
Steam Valves	Steam Turbines
Generators	Fans
Air Compressors	Heavy Equipment
Conveyor Systems	Transformers
Pile Drivers	Grinders
Drill Rigs	Gas or Diesel Motors
Welders	Cutting Equipment
Outdoor Speakers	Blowers

The types of uses which may typically produce the noise sources described above include, but are not limited to: industrial facilities, including lumber mills, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

N3D. Limit the siting of loading and shipping facilities for commercial and industrial land uses adjacent to residential parcels, whenever practicable.

N3E. Require that parking areas for commercial and industrial land uses be set back from adjacent residential areas to the maximum extent feasible or buffered and shielded by walls, fences, berms, and/or landscape.

N3F. Require that parking structures serving commercial or industrial land uses be designed to minimize the potential noise impacts both on site and on adjacent properties. Design measures may include the use of materials that mitigate sound transmission and the configuration of interior spaces to minimize sound amplification and transmission.

N3G. Encourage existing major fixed noise sources throughout the City of Redding to voluntarily install additional noise-buffering or reduction mechanisms within their facilities to reduce noise impacts to the lowest level practicable.

N3H. Require the installation of noise-buffering or reduction mechanisms, where appropriate, for major fixed noise sources throughout the City prior to the approval, amendment, and/or issuance of conditional use permits for these facilities.

N3I. Require residential development projects, newly developed residential areas, and noise-sensitive projects to be responsible for noise mitigations to lessen the impacts from adjacent and nearby industrial uses and urban activities when the following conditions exist:

- If, at the time of development, the industrial uses complied with all the noise mitigations based on anticipated noise sources and noise levels.
- If, at the time of development, adjacent vacant land is designated for commercial or industrial development.
- The noise level measured at the residential property line exceeds the residential noise standards due to the cumulative effect of nearby existing industrial and new industrial noise sources and increased noise levels of urban activities (i.e., traffic, trains, aircraft, etc.)
- The industrial use emitting the noise conforms with the land use classification of the General Plan, zoning district, and all conditions of City permits.
- The industrial use has not added additional noise-producing equipment or substantially changed its hours of operation from what has been approved by the City.

Housing Element

Housing Element

INTRODUCTION

PURPOSE AND CONTENT

The purpose of the Housing Element of the Redding General Plan is to identify and analyze the City's housing needs; to establish reasonable housing goals and objectives based on those needs; and to develop a program of action, which, over the stated planning period, will advance the City towards achieving the established goals and objectives.

LEGISLATIVE AUTHORITY

The State Legislature has determined that the availability of housing is of vital importance to the well-being of the State's populace and has mandated the preparation of community housing elements as part of local general plans (Government Code Sections 65302 and 65580, et seq.). Under current law, the code specifies, in brief, that the Housing Element shall contain:

1. An assessment of local housing needs and an inventory of resources and constraints relevant to the meeting of these needs.

2. A statement of the community's goals, policies, quantified objectives, and financial resources relative to the maintenance, improvement, and development of housing.

3. A program which sets forth a schedule of actions the local government is undertaking or intends to undertake over the planning period to implement the policies and achieve the goals and objectives of the Housing Element.

Current State Housing Element Law, as contained in Section 65588 of the Government Code, mandates that each local government shall review its housing element as frequently as appropriate to evaluate the following: (1) the appropriateness of the housing goals, objectives, and policies in contributing to the attainment of the State housing goal; (2) the effectiveness of the element in attainment of the community's stated housing goals and objectives; and (3) the progress made in implementation of the housing element. Complete revisions would normally occur on a five-year schedule; however, since 1992 the State legislature has approved several modifications to that schedule. The law presently states that the next mandatory update of Redding's Housing Element shall be adopted by June 30, 2003.

CONSISTENCY WITH OTHER ELEMENTS OF THE GENERAL PLAN

Government Code Section 65300.5 states that the goals and policies of the Housing Element must be consistent with other elements of the General Plan.

In 1995, Redding embarked upon a complete revision of its existing General Plan, with adoption occurring in 2000. Initially, because no revision was statutorily required until 2003, the Housing Element was not to be included in the work plan. Subsequently, it was determined that in order to ensure that internal consistency was maintained between all elements of the General Plan, including the Housing Element, a limited update of the Housing Element was considered to be necessary. Specific attention has been given to those portions of the element that are affected by changes made in the City's General Plan Diagram and related development policies.

Changes have been made to the Housing Element with the primary goal of maintaining internal consistency between elements of the General Plan as required by law. Specifically, the *COMMUNITY PROFILE* section has been updated to reflect current population and growth trends, vacancy rates, income levels, unemployment rates, current dwelling unit counts, and construction figures, as well as to include current subsidized housing statistics. The *LAND INVENTORY*

AND SITE AVAILABILITY section was updated to reflect changes made to residentially designated vacant land as reflected in the updated General Plan Diagram. The *INFRASTRUCTURE STATUS AND LIMITING FACTORS* section was updated to reflect current utility and infrastructure capacities and growth figures. A complete update of the *HOUSING NEEDS ASSESSMENT* section was not undertaken at this time. The State-mandated basis for the analysis of need contained within the *HOUSING NEEDS ASSESSMENT* section is statistical data derived from the most recent U.S. Census completed in 1990. Current, comprehensive, statistically reliable data on which to base a complete update will not be available until sometime after the 2000 Census is complete. It is anticipated that a complete update will occur at the time of the next required Housing Element revision in 2003. The *GOVERNMENTAL CONSTRAINTS TO MAINTENANCE, IMPROVEMENT, AND DEVELOPMENT OF HOUSING* section was updated to reflect the impacts, if any, of new policies contained within the proposed General Plan, primarily within the Community Development and Design Element (previously, the "Land Use" Element). The *GOALS AND POLICIES* section was reviewed and updated where appropriate to ensure consistency with other goals and policies contained within the updated General Plan.

COMMUNITY PARTICIPATION

The following organizations were among those consulted during the development of the revised Housing Element: Northern Valley Catholic Social Service; Shasta Housing Development Corporation; People of Progress; Legal Services of Northern California; Good News Rescue Mission; Shasta County Women's Refuge; Golden Umbrella; City of Redding Housing Authority, Public Works Department, Development Services Department, and Electric Department; Shasta County Board of Realtors; and Shasta County Mental Health.

In October 1999, the Redding Planning Commission held a series of noticed public hearings specifically to gather additional information on issues related to multiple-family residential development within the community. The Commission was trying to determine whether additional vacant land designated at densities suitable for multi-family development was needed within the community in order to meet the housing needs of Redding's current and future population. At the conclusion of the hearings, the Commission approved the modification of the General Plan Diagram to increase the amount of vacant land designated at a variety of residential densities throughout the community.

The current limited amendment of the element will be subject to review by the public and other interested bodies in conjunction with the public review of the proposed revised General Plan. Prior to adoption by the City Council, the complete General Plan has been referred to the Redding Planning Commission for review, revision if appropriate, and additional public hearings.

COMMUNITY PROFILE

HISTORIC AND CURRENT POPULATION PROFILE

The 1970 Census established the Redding population at 16,659. The 1980 Census recorded 41,995 persons, an annual average population growth rate of over 15 percent. The 1990 Census reported a population of 66,462 (or 26,105 households), an increase of over 58 percent since 1980. In the period since the 1990 Census, the California Department of Finance has developed annual population estimates for California counties and cities. The Department of Finance population estimate for the City of Redding is 78,518 as of January 1998 (or 32,935 households). This figure implies an average growth rate of 2.2 percent each year since 1990.

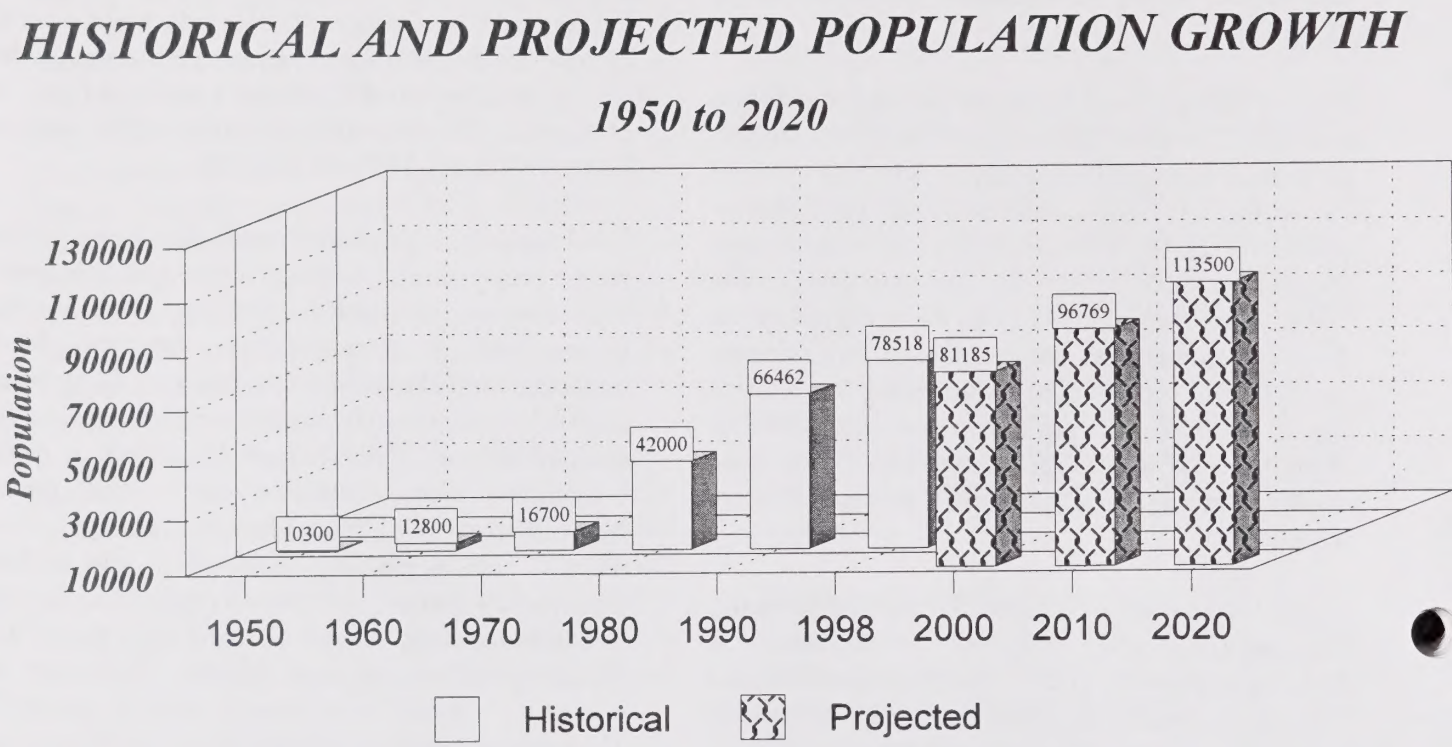
A study conducted in October 1998 by The Economic Sciences Corporation projected the population of Redding to the year 2020. The projection included numerous factors which could affect population growth, such as fertility, mortality, in-migration, annexations, etc. Assuming all factors remain predictable, Redding's population is projected to reach 113,500 by the year 2020, reflecting a slightly decreased annual average growth rate of about 1.7 percent for the next twenty years. Figure 1 shows Redding's historical population from 1950–1990 and its projected population through 2020.

INCOME AND ETHNICITY

Current 1998 income figures provided by the U.S. Department of Housing and Urban Development through the State Department of Housing and Community Development (HCD) indicated that as of January 1998, the median household income in the City of Redding was $37,100 for a family of four. In comparison, the national median income for a family of four as of January 1998 was $45,300.

For demographic purposes, household income can be further broken down into several distinct income levels. The standard terminology used for these various income levels is extremely low-, very low-, low-, moderate-, and above-moderate income. These terms are used to describe relative income ranges tied to the median income of all households within a given community. Thus, "extremely low-income" means below 30 percent of the median income; "very low-income" means below 50 percent of the median income; "low-income," between 51 and 80 percent; and "moderate-income," between 81 and 120 percent (for Federal programs, between 81 and 95 percent of median). "Above moderate-income" is generally 121 percent and above (Federal programs, 96 percent and above). The term "lower-income" includes "low-income," "very low-income," and "extremely low-income," or all households that do not exceed 80 percent of median household income.

FIGURE 1


HISTORICAL AND PROJECTED POPULATION GROWTH
1950 to 2020
Population
130000
110000
90000
70000
50000
30000
10000
10300
12800
16700
42000
66462
78518
81185
96769
113500
1950
1960
1970
1980
1990
1998
2000
2010
2020
Historical
Projected

The 1990 Census indicated that approximately 8.3 percent of Redding's households were in the extremely low-income category, 14 percent in the very low-income category, 17.8 percent in the low-income category, and 17.1 percent in the moderate-income (81–120 percent) category. In October 1991, the State Department of Housing and Community Development (HCD) utilized 1980 income data relative to the actual County median income adjusted by family size to determine the approximate breakdown by percentage of each income group within the community. According to HCD's calculations, in Redding, 22 percent of all households are very low-income, 19 percent of all households are low-income, 20 percent of all households are moderate-income, and 39 percent of all households are above moderate-income. To the extent that these percentages have not changed over the past seven years, the number of households in each category in 1998 would be: 7,246 very low-income households, 6,258 low-income households, 6,857 moderate-income households, and 12,845 above moderate-income households.

Census figures from 1990 indicate that minorities constitute 10 percent of Redding's population. Of these minorities, 4 percent were of Hispanic descent, 3 percent were Asian, 2 percent were American Indian, and 1 percent were Black.

There exists a higher proportion of lower-income families among these minority groups than in the population at large. According to the 1990 Census, 54.6 percent of minority households had incomes at or below 80 percent of the median income. Among the general population as reported in the 1990 Census, 40.1 percent of households were considered lower-income. Minority families, along with all lower-income households of the community, face common problems and hardships in regard to meeting their housing needs.

HISTORIC AND CURRENT EMPLOYMENT TRENDS

The unemployment rate for the Shasta County Labor Market Statistical Area which includes the City of Redding, has slowly declined over the past six years. In 1992, the area's annual average unemployment rate was 13.2 percent. The actual average unemployment rate for 1997, the last full year for which the rate has been computed, was down to 9.1 percent. It is likely that when statistics for December 1998 are tallied with the previous eleven months, the average annual rate for 1998 will be lower still. Even with this positive trend, however, Redding's unemployment rate remains substantially above the State average of 6.3 percent for 1997 and approximately 6 percent for 1998.

Redding's current employment opportunities are the greatest in the lower-paying industries; these are service industries associated with tourism and business services and the wholesale and retail trade industry. In addition to paying lower overall wages, service and/or retail industries typically have a higher percentage of persons working part-time or seasonally than do other types of industries.

The availability of permanent, secure employment paying a decent wage is a critical factor in the ability of an area's population to secure housing. Conversely, an area's ability to attract new industry and increased job opportunities for its residents is directly related to the ready availability of decent, affordable housing in the community.

HISTORIC AND CURRENT HOUSING PROFILE

In 1980, the Census recorded 17,932 housing units in Redding. According to the 1990 Census, in April 1990, there were 27,238 housing units within the City of Redding. The State Department of Finance has estimated the total number of dwelling units within the City of Redding as of January 1998 to be 33,423, an increase of 6,185 units or 22.7 percent in available housing units between 1990–1998.

New construction is responsible for 98 percent of the overall increase in available housing stock. According to figures compiled by the City of Redding Development Services Department, 6,056 new housing units were constructed from January 1990 through December 1997. Of the total units constructed, 4,585 (75.7 percent) were single-family homes, 1,435 (23.7 percent) were multiple-family units, and 36 (0.5 percent) were mobile homes.

TYPE, AGE, AND CHARACTERISTICS OF HOUSING STOCK

City of Redding Municipal Utility connection records as of December 1998, indicate that Redding's housing stock consists of approximately 33.65 percent

multiple-family structures and 66.34 percent single-family units.

As reported in the 1990 Census, Redding has 17,903 housing units which were built prior to 1980. These 20+ year old structures comprise 53.6 percent of Redding's housing stock. Of these units, 11,603 were built between 1960–1979; 5,157 were built between 1940–1959 (40 to 59 years of age); and 1,143 were built prior to 1940 (60+ years of age). Overall, approximately 46.4 percent of Redding's available housing stock is less than 20 years old.

There exists a correlation between the age of a community's housing stock and the relative condition of that housing stock. Typically, dwelling units over 20 years of age are the most likely to need both moderate and major rehabilitation work to elevate them to a "standard" condition.

CONDITION

A "windshield survey" conducted by the City of Redding Housing Division in 1993 indicated that under 10 percent of the dwelling units in existence at that time exhibited outward signs of deferred maintenance or deficient physical conditions. However, windshield surveys are limited in that both the rear exterior and the complete interior of the structure are not evaluated. Housing staff estimates that it is likely that 12–14 percent of Redding's current housing stock would be improved by some level of rehabilitation. Additionally, it is estimated that approximately 2 percent of the housing stock is in such an extreme state of disrepair that it would not be financially feasible to rehabilitate the existing structure.

Current City rehabilitation programs are available citywide and staff monitors conditions present in all neighborhoods on a periodic basis. Of all occupied substandard units, it is estimated that 51 percent are occupied by lower-income households.

As reported in the 1990 Census, 41.8 percent of low-income renter households and 28.3 percent of low-income homeowners occupy units that were constructed prior to 1980. In addition to containing possible lead-based paint hazards, this age unit is the most likely to require rehabilitation.

Housing units are considered substandard if they meet the following definition: Those buildings which exhibit one or more critical structural, plumbing, and/or electrical deficiency or a combination of intermediate defects in sufficient number or extent to require considerable repair or rebuilding. Units are also considered substandard if they do not provide safe and adequate shelter or endanger the health, safety, or well-being of the occupants.

Substandard housing units are further classified into those that are suitable for rehabilitation and those which are not suitable for rehabilitation. The following definition of "suitable for rehabilitation" is used: Those buildings which exhibit one or more of the deficiencies listed under the above definition of substandard, all of which can be repaired in conformity with current codes and ordinances for a sum not to exceed the value of the building. Buildings are considered "not suitable for rehabilitation" when the cost of the needed repairs would exceed the value of the structure. As property values escalate, some buildings previously determined "unsuitable for rehabilitation" become "suitable for rehabilitation."

VACANCY RATES

According to the 1990 Census, Redding's vacancy rate for all types of dwelling units available for sale or rent in 1990 was 2.1 percent. The vacancy rate for all types of owner-occupied dwelling units was reported to be approximately 1.5 percent. For rental units alone, the reported vacancy rate was approximately 3 percent.

The City of Redding Electric Utility maintains a comprehensive monthly data base of vacancy rates as well as population and household estimates for the 33,126 housing units in the City to which it provides service. These units comprise over 99 percent of the 33,423 units estimated by the State Department of Finance to exist in the City of Redding. The January 1, 1998, vacancy estimate provided by the State Department of Finance indicates a 4.16 percent overall dwelling unit vacancy rate in the City of Redding. The State does not differentiate between multiple-family unit vacancies and single-family unit vacancies.

In contrast, as of November 30, 1998, Redding Electric Utility records indicate an overall housing unit vacancy rate of 7.8 percent. Further, when examined

separately, the vacancy rate for single-family units was reported to be 6.5 percent, with the vacancy rate for multiple-family units at 11.8 percent.

Vacancy rates, as an indicator of market conditions, typically run a fine line between an over-built market (typically considered above 7 percent vacancy) and an under-built market (generally anything under 3 percent). In a healthy market, there should be some number of vacant units in all sizes, locations, and price ranges.

Redding's housing market has changed substantially over the past 6–8 years. The current vacancy rate for single-family homes seems to indicate an abundance of available units that is almost on the verge of hitting the "over-built" threshold. The vacancy rate reported for multiple-family units falls substantially in the range that would indicate an oversupply of this type of unit.

Vacancy rates are an important tool used in market analysis, however, in order to fully analyze the effect of vacancies upon a specific housing market, it is necessary to delve deeper into vacancy by type, location, price range, number of bedrooms, and size of unit. There could exist a surplus of units at one level and a scarcity at another which when averaged together indicate a vacancy rate indicative of neither. There is no information currently available which compares variation in the vacancy rate based on price of unit or size of unit in the Redding area.

High vacancy rates, however, do not necessarily mean that rental units will become more affordable as a private market reaction. Experts suggest that during periods of high vacancies, owners of rental properties will utilize financial incentives such as reduced deposits, move-in allowances, even offering periods of free rent in order to entice prospective renters rather than actually lowering rental rates.

Based upon information gathered from its clients in their search for rental housing in the Redding area, the Redding Housing Authority has indicated that the local rental market remains "tight" for all unit sizes in an affordable price range. Further, affordable 3+-bedroom units are very scarce for lower-income families. Approximately 24.6 percent of the households currently on the Housing Authority waiting list qualify by family size for units of this size.

According to City of Redding Building Division records, of the 245 multiple-family units built during the 36-month period January 1996 through December 1998, only 8 percent (20) were constructed with 3+ bedrooms. Larger, low-income families continue to have little choice of suitable units.

LOW-INCOME ASSISTED HOUSING

As of January 1999, 1,304 very low-income households within the City of Redding were receiving government-assisted housing subsidies administered through the Redding Housing Authority. These subsidies are in five program categories: (1) Aftercare Subsidies; (2) HUD Section 8 Vouchers; (3) HUD Section 8 Moderate Rehabilitation Subsidies; (4) HUD Section 8 Existing Certificates; and (5) HOME Two-Year Vouchers.

Assisted units are scattered throughout the City with the highest concentration in neighborhoods with lower priced, multiple-unit complexes available. Another 413 site-specific HUD rental subsidies are available for use at ten multiple-family rental complexes in Redding that utilized HUD 811, 202, 231, or 236 financing assistance. These complexes are Redding Pilgrim House, Butte House, Cottonwood House, Heritage Plaza, Redding Gardens, Kutras Gardens, Treehouse Senior Apartments, Wilshire Place, Della Williams Gardens, and the Lorenz Hotel. Of the available subsidies, 118 are reserved for seniors, 48 for disabled individuals, 110 for either seniors or disabled, and 137 for families.

Currently, priority for rental assistance is determined by date of application to the waiting list as well as City of Redding residency and veteran status. Priority is also given to those households who have been displaced by local government action. The Redding Housing Authority opened its waiting list to accept new applications for a 31-day period starting October 1, 1998. Approximately 1,854 households are now on the waiting list. As of January 1999, all available subsidies had been completely allocated to eligible households. The Redding Housing Authority estimates that the average length of time between application date and receipt of rental assistance is six months for City of Redding residents.

As discussed in the previous sections on income and renter status, approximately 22 percent of the population (7,246 households in 1998) in Redding are

considered very low-income. Of these, approximately 65 percent (4,710 households in 1998) are renters and potentially eligible for subsidized housing assistance. These figures indicate a gap between the assistance available and the number of households likely to need assistance.

AFFORDABLE HOUSING UNITS ELIGIBLE TO CONVERT TO OPEN MARKET DURING 1992–2002

The State Government Code requires that a community's Housing Element contain analysis and program efforts for preserving assisted housing developments in the community which are eligible to convert to non-low-income use within ten years of the statutory adoption "due date" of the Housing Element. The purpose of the analysis is to identify actions the jurisdiction can take to preserve at-risk units, to adequately plan for preventing or minimizing tenant displacement, and to preserve the local affordable housing stock.

The ten-year period which was covered by the original analysis was July 1992 through June 2002. To make the analysis useful to the five-year Housing Element updates, the inventory was divided into two 5-year groups, coinciding with the planning periods originally anticipated for the Housing Element.

State law requires that the inventory include all multiple-family rental units which are assisted under any of the programs listed below:

1. HUD Programs:
   - Section 8 Lower-Income Rental Assistance project-based programs.
   - New Construction.*
   - Substantial or Moderate Rehabilitation.
   - Property Disposition.*
   - Loan Management Setaside.
   - Section 101 Rent Supplements.*
   - Section 213 Cooperative Housing Insurance.*
   - Section 221(d)(3) Below-Market-Interest-Rate Mortgage Insurance Program.
   - Section 236 Interest Reduction Payment Program.
   - Section 202 Direct Loans for Elderly or Handicapped.
   - Community Development Block Grant Program.*
2. FmHA Section 515 Rural Rental Housing Loans.*
3. State and local multiple-family revenue bond programs.*
4. Redevelopment programs.*
5. Local in-lieu fee programs or inclusionary programs.*
6. Developments which obtained a density bonus and direct government assistance pursuant to Government Code Section 65916.*

All categories marked with an asterisk (*) do not have units in the community which are considered at-risk during the subject ten-year period.

Table 1 illustrates the projects which contain affordable units in the community which were identified as being at risk in the City of Redding during the initial ten-year period. The listed at-risk units are subject to a variety of different regulatory requirements which, when combined with market conditions, determine the actual likelihood of loss of the affordable units. Following the table is a summary of the current status of those units that were listed as being at-risk through 1998. A complete analysis of the units remaining at-risk through July 2002 follows that summary.

TABLE 1

INVENTORY OF LOW-INCOME RENTAL UNITS IN THE CITY OF REDDING SUBJECT TO TERMINATION OF FEDERAL MORTGAGE AND/OR RENT SUBSIDIES BY JULY 2002			
July 1992–June 1997			
PROJECT NAME	TYPE OF PROGRAM	TOTAL # UNITS	EARLIEST DATE OF TERMINATION
Moderate Rehabilitation Increment 1	Section 8	48 (18 elderly) (All subsidized)	3/31/97
Redding Gardens Cooperative 301 South Street Redding	221(d)(3) Section 8	120 (48 subsidized)	Subsidies: 11/03/96 Mortgage: 01/17/14
Downtown Plaza Apartments 1075 Trinity Street Redding	236(J)(1)	90 (No subsidies)	Eligible LIHPRHA Property Mortgage: 12/19/91
July 1997–June 2002			
PROJECT NAME	TYPE OF PROGRAM	TOTAL # UNITS	EARLIEST DATE OF TERMINATION
Moderate Rehabilitation Increment 2	Section 8	60 (All subsidized)	12/31/97
Moderate Rehabilitation Increment 3	Section 8	51 (All subsidized)	9/30/98
Moderate Rehabilitation Increment 4	Section 8	20 (5 elderly) (All subsidized)	6/30/99
Moderate Rehabilitation Increment 5	Section 8	48 (18 elderly) (All subsidized)	9/30/00
Kutras Gardens 540 South Street Redding	231 Elderly Section 8	84 (all elderly) (40 subsidized)	Subsidies: 07/05/97 Mortgage: 06/30/17

Current Status of Units Identified as At Risk through 1998

While a review of the status of these units is not required until the next mandatory revision of the Housing Element in 2003, the following information has been included relative to any changes that may have occurred to these units since the original report in 1992.

Redding Gardens Cooperative. Redding Gardens Cooperative is the only facility of its kind within the Redding community. Under the cooperative ownership of its residents operating through a nonprofit structure, the facility maintains below market rate "rents" for all its 120 units. In 1992, 48 units at this facility were listed as additionally "subsidized." Today, while only 16 of those units remain "subsidized," all the units at this facility are substantially below market rate and would, for most very low-income households, be considered affordable.

Downtown Plaza Apartments. This facility converted its 90 units to market-rate in 1992. All eligible tenants (those with household incomes at or below 80 percent of median) were offered HUD "Preservation Vouchers" that could be used to lease in place if the household desired or at a different location of their choice. The Redding Housing Authority reports that the majority of eligible households took advantage of this benefit.

Kutras Gardens. No changes have occurred at this senior complex over the past eight years. Based upon a recent discussion with the onsite manager, there are no plans for the subsidized units to be converted to market rate prior to 2017, the date that the HUD mortgage is retired.

Moderate Rehabilitation Increments 1, 2, 3. In early 1997, HUD made available "Replacement Certificates" to the 48 tenant households residing in units subsidized under Increment 1. These subsidies were able to be used by the families to lease in place or at another location of their choice. Later in 1997, prior to the expiration of Increment 2 subsidies on 60 units, HUD provided one-year extensions of the existing Moderate Rehabilitation contracts to properties containing 5 or more units and individual family subsidies to tenants residing in smaller complexes (those with 4 or less units). In September 1998, at the expiration of Increment 3 subsidies on an additional 51 units, HUD provided the same two types of subsidies as provided to Increment 2 units and tenants. Further, HUD extended the Moderate Rehabilitation contracts for Increment 2 units for an additional 12-month period.

Remaining Units At Risk Between January 1999 and June 2002.

During the period January 1999–June 2002, only one program is involved, the Moderate Rehabilitation Program with Section 8 project-based subsidies. Increments 4–5, with 58 remaining units under subsidy, expire during this period. It is extremely likely that HUD will extend these subsidies as it has in the past for larger (5+ units) facilities covered under other increments and provide individual subsidies for those households residing in smaller complexes. If this does not happen, the Redding Housing Authority would consider the following mitigating measures: offering non-project-based subsidies, as available, to the affected families to be used in a location of their choice; negotiating continued affordability with the owners in exchange for other nonsubsidy program assistance such as rehabilitation or aiding a nonprofit housing entity to acquire the units in return for continued affordability; and replacement of the units through support of new affordable housing development. The affected units are typically older and many are in need of rehabilitation work.

Of the 58 remaining subsidies, 24 are attached to single-family homes being used as rental units and 34 are connected to a variety of multiple-family structures.

Cost Analysis of Preserving Versus Replacing At-Risk Units

According to Section 65583(a)(8)(B) of Housing Element Law, the cost of producing new rental housing comparable in size and rent levels to replace the "at-risk" units and the cost of preserving all the units for the planning period, must be included in the Housing Element.

The at-risk units range in size from 1–3 bedrooms and are comprised of multiple-family units in 2–5 unit configurations and single-family homes. It is assumed that if replacement units were to be developed, multiple-family units would be utilized not single-family homes. For that reason, the following analysis only considers the cost for replacement through multiple-family development.

General development costs for multiple-family projects are discussed in detail in the sections entitled *GOVERNMENTAL CONSTRAINTS TO MAINTENANCE, IMPROVEMENT, AND DEVELOPMENT OF HOUSING* and *NONGOVERNMENTAL CONSTRAINTS TO MAINTENANCE, IMPROVEMENT, AND DEVELOPMENT OF HOUSING.* Based upon a low-average construction cost for multiple-family units of $45 per square foot; a low-average land cost of $4,000 per unit; indirect costs (construction interest, off-sites, on-sites, architectural, and civil engineering) of $5,000 per unit; and average per-unit fees of $6,500, each 800-square-foot, 1-bedroom unit would cost approximately $51,500. Replacement cost for each 900-square-foot, 2-bedroom unit would be approximately $56,000; and each 1,000-square-foot, 3-bedroom unit would run approximately $61,500. The estimated cost to replace the remaining 58 "at-risk" units would be approximately $3,229,000.

As stated previously, all the units are older and many are in need of rehabilitation work. Projected acquisition costs must include the cost of any rehabilitation work necessary to bring the units up to a standard level. Basic acquisition cost for units of comparable age and condition would be approximately $80,000 for a single-family unit and approximately $31,000 per unit for the multiple-family structures.

The rehabilitation staff with the City's Housing Division, drawing from many years of experience with rehabilitation programs targeting similar rental units, estimates that the average per-unit rehabilitation cost for units of comparable size, age, and condition is approximately $20,000. Using an average acquisition cost of $31,000 per multiple-family unit and $80,000 per single-family unit, coupled with an average rehabilitation cost of $20,000 per unit, the cost of acquiring and preserving the 58 "at-risk" units is approximately $4,134,000.

The cost of keeping the rents at an affordable level for units which have been either acquired or newly constructed is dependent upon the type of financing used to purchase or construct the units. Market-rate financing would require a much larger monthly revenue stream to cover the higher cost of the financing. It is likely that revenues from affordable rents would not be sufficient to cover the cost of debt service on the units. A substantial part of either construction or acquisition cost would need to be underwritten by some form of deep subsidy. A full pro forma on each individual project would be necessary to arrive at more than a broad estimate of costs involved. The following rent subsidy cost estimate is based upon the 1998 average annual Section 8 subsidy paid for comparably sized units. The remaining 58 at-risk units are comprised of 25 one-bedroom units, 16 two-bedroom units, and 17 three-bedroom units. The estimated annual subsidy cost necessary to keep similar units affordable for very low-income households is $196,536.

Resources for Preservation

As stated previously, four separate entities have expressed interest in being notified under the first right of refusal option if affordable housing projects become available in the Redding area. These include the Redding Housing Authority (RHA), the Shasta Housing Development Corporation, as well as two housing development organizations from outside the area. In addition, Northern Valley Catholic Social Service, a local nonprofit housing service provider, has the ability to acquire and manage assisted housing projects. In order to ensure continued affordability of the units, acquisition by any of these entities would very likely require continued rental assistance by HUD or a deep subsidy from Federal, State, or local sources applied towards the acquisition costs.

It is unlikely that sufficient local funding sources will be available to fully subsidize acquisition, rehabilitation, or development of new affordable units to replace those at risk of being lost over the remaining four-year period. The City receives approximately $920,000 in Federal Community Development Block Grant (CDBG) funds annually. These funds are allocated through a highly competitive process and have historically been utilized for a variety of community projects, including housing.

The Redding Redevelopment Agency generates approximately $1,000,000 in its Housing Setaside Fund annually. This fund is utilized locally in a variety of ways to improve the housing opportunities for the area's lower- and moderate-income households. Over the next four years, approximately $4 million will be available for this purpose.

The Redding Housing Authority administers approximately 1,304 rental subsidies for which it receives administrative fees. During FY 97–98, the RHA received approximately $660,000 in administrative fees. These fees are utilized by the Housing Authority to cover the cost of administering the Section 8 rental assistance program in the community. Over the next four years, it is anticipated that approximately $2.64 million will be received through this source. It is not anticipated that funds in excess of the amount needed to run the program will be available.

Several new construction programs funded through the Federal government are currently available for affordable housing projects. These offer money at reduced interest rates or on a grant basis in exchange for affordability of units. In addition, various mortgage bond programs and Federal tax credits might be accessed to enhance a project's affordability. Another avenue for reducing the cost of development is the use of the local Density Bonus Program.

In summary, creative projects, whether acquisition or new development, which combine a variety of local, State, Federal and private dollars have a greater likelihood of success in the current housing market. The City is committed to working towards enhanced housing affordability for the community's lower-income households and, as it has in the past, will consider commitment of housing funds such as the redevelopment low-income housing setaside and its Community Development Block Grant, as well as HOME funds, towards that end.

HOUSING NEEDS ASSESSMENT

State housing element law requires that a community analyze both its existing housing needs and its projected housing needs for the required planning period. Such existing and projected needs analysis must include consideration of the locality's share of the regional housing need as provided by the local Council of Governments or, in Redding's case, as provided by the State Department of Housing and Community Development (HCD).

This chapter includes an updated analysis of local housing market characteristics for both renters and homeowners; an analysis of the special housing needs of the area's population, particularly for the following identified groups—the elderly, the handicapped, large families, families headed by a single-female parent, minorities, and the homeless; and an analysis of the projected new construction housing needs of the Redding area utilizing the regional housing share figures provided by HCD in 1991. It concludes with an inventory of residentially classified land based upon the General Plan Diagram included in the revised General Plan.

At the recommendation of State HCD staff, the analysis of special housing needs has not been substantially changed for the 1999 amendment. Much of the basis for this section is statistical data provided through the U.S. Census. New census data will not be available until 2001 or 2002. A complete review and analysis of this topic will be conducted at the time of the next mandatory Housing Element revision in 2003. To the extent 1990 Census information was not available at the time the Housing Element was prepared in 1992, that information has now been added.

HOUSING CHARACTERISTICS

Homeownership/Housing Costs/Ability to Pay

In 1990, the Census reported that 53.5 percent of all households in Redding resided in housing units that they owned. Based on 1998 household figures, this translates into 17,620 owner-occupied households. Census data from 1990 showed that approximately 21.8 percent of all homeowners surveyed were overpaying for housing. Among the lower-income homeowners (26.2 percent of all homeowners), 50.9 percent were overpaying for housing. To the extent the 1990 Census statistics are still accurate, in 1998 this would translate to approximately 3,841 homeowners currently overpaying, out of which approximately 2,350 are lower-income.

A commonly accepted definition of "affordable" as it relates to housing costs is when a household pays no more than 30 percent of its gross monthly income for housing expenses. For a homeowner, these expenses are principal and interest payments for mortgages, as well as property taxes, and homeowner's insurance. For a renter, housing expenses include the basic monthly rent, plus utility costs. Housing payments totaling more than 30 percent of the household's income constitute "overpaying." A household with monthly housing costs totaling more than 50 percent of income is considered extremely cost-burdened.

In Redding, as throughout the country, the dream of homeownership is an integral part of American life. It continues to be a goal for many citizens and, historically, has been used as an indicator of status and prosperity.

According to information provided by the Shasta County Board of Realtors, the median price of a single-family home in the City of Redding in 1998 was $113,000. Only a slight increase in this amount has occurred over the past seven years, from $110,000 in 1991 to $113,000 today. The average price of a new single-family detached home currently being built within the City of Redding was reported to be $155,000.

The area's 1998 median income for a family of four, $37,100, generally indicates an ability to purchase a home with a maximum purchase price three (3) times as great or $111,300. While this is slightly below the median price, a substantial number of homes are available in Redding at or below this amount. According to the Shasta County Board of Realtors, over a recent twelve-month period ending December 1998, 2,378 homes were listed for sale in Redding. Of these, 637 (26.7 percent) were listed for a sales price at or below $95,000. Most homes in this price range are resale units and would be considered modest in quality.

Current interest rates hover around 7 percent on a 30-year fixed rate mortgage. This document assumes that these relatively low interest rates will remain steady over at least the next year.

Due to Redding's relatively low housing prices, coupled with the current nationwide low mortgage interest rates, median- to moderate-income Redding residents are able to take advantage of homeownership opportunities that are almost unknown in other, higher priced areas of the State. Table 2 presents the affordability of homes in several price ranges, under several different interest rate scenarios for low-, median-, and moderate-income households.

As Table 2 illustrates, homeownership opportunities are more limited as incomes decrease and as interest rates increase. In addition to generally being unable to support the level of monthly mortgage payment required for all but the least expensive homes available, lower-income households have a more difficult time accumulating the amount necessary for the required down payment and closing costs.

TABLE 2

MAXIMUM HOME PURCHASE AFFORDABILITY CHART				
INCOME GROUP	PURCHASE PRICE	REQUIRED 5% DOWNPAYMENT	INTEREST RATE	FIRST-MORTGAGE*
LOW (<80% of median)				
Maximum annual income for family of 4 = $29,700	$97,850	$4,650	7%	$93,200 ($742.40 PITI)
Maximum monthly income for family of 4 = $2,475	$90,289	$4,514	8%	$85,775 ($742.27 PITI)
Maximum "affordable" (30% of gross income) housing payment = $742.50	$83,475	$4,175	9%	$79,300 ($742.42 PITI)
MEDIAN (81 - 100% of median)				
Maximum annual income for family of 4 = $37,100	$122,500	$6,125	7%	$116,375 ($927.40 PITI)
Maximum monthly income for family of 4 = $3,092	$112,750	$5,650	8%	$107,100 ($926.82 PITI)
Maximum "affordable" (30% of gross income) housing payment = $927.60	$104,250	$5,225	9%	$ 99,025 ($927.11 PITI)
MODERATE (101-120% of median)				
Maximum annual income for family of 4 = $44,500	$146,750	$7,350	7%	$139,400 ($1,110.90 PITI)
Maximum monthly income for family of 4 = $3,708	$135,300	$6,775	8%	$128,525 ($1,112.23 PITI)
Maximum "affordable" (30% of gross income) housing payment = $1,112.40	$125,000	$6,250	9%	$118,750 ($1,111.77 PITI)

* Assume a 30-year, fixed rate conventional mortgage, listed payment includes monthly property tax and insurance impounds of 0.125% of purchase price.

Rentals/Ability to Pay

According to the 1990 Census, 46.5 percent of all occupied housing was classified as renter-occupied. Using 1998 household figures, this means approximately 15,315 households rent rather than own their principal residence.

The 1990 Census reported that approximately 47 percent of all renter households were overpaying for housing. However, among the lower-income renter households, approximately 74 percent were paying in excess of 30 percent of the household's monthly income for housing. Lower-income renters make up approximately 57 percent of all renter households. To the extent the 1990 Census ratios are still accurate, using 1998 household figures this means there are approximately 8,730 low-income renter households, out of which 6,460 (74 percent) are overpaying for housing. There is a continuing need for rental assistance programs targeting extremely low and very low-income renter households. There is also a need for continuation of program assistance which serves to increase the affordability of rental units occupied by lower-income households.

Rental prices in Redding have slowly increased over the past eight years. The 1990 Census reported the median rent paid in Redding to be $373. According to a survey conducted by the Redding Housing Authority in 1998, of 92 advertised and available rental units, rent figures ranged from an average of $346 for 1-bedroom apartments to an average of $760 for 3-bedroom houses. Median rent for all sizes and types of rental units surveyed was approximately $430.

Overcrowding

According to the 1990 Census, approximately 4.5 percent of the general population are living in overcrowded conditions. Using 1998 household figures, this translates to approximately 1,482 overcrowded households. An overcrowded household is one in which more than 1.01 persons occupies each room of a dwelling unit. The Census further documents that of the overcrowded households, 82.5 percent (in 1998, 1,223 households) are renters and 17.5 percent (in 1998, 259 households) are homeowners.

The incidence of overcrowding is substantially greater for renters as income level decreases and family size increases. The 1990 Census reported that among all overcrowded renter households, 9 percent of households with incomes between 51 percent and 80 percent of median income are overcrowded, 9.4 percent of households with incomes between 31 and 50 percent of median income, and 11.2 percent of households with incomes under 30 percent of median income. For large renter households (those households with five or more members) 40 percent are overcrowded. Large renter households with incomes under 50 percent of median show severe overcrowding. Approximately 63.3 percent of large renter households with incomes between 31 and 50 percent of median are overcrowded, and for those large families with incomes below 30 percent of median, 72.8 percent are living in overcrowded conditions.

Based upon the scarcity and cost of larger (3+ bedrooms) rental units within the City of Redding, it is likely that some larger families are forced to accept smaller units than what would be the ideal for the family size. The Redding Housing Authority reports that a majority of the families on the 4+-bedroom waiting list for subsidies end up renting smaller units due to the scarcity of appropriately sized units.

Special Housing Needs

Some population subgroups, such as the elderly, persons with disabilities, large families, female-headed households, farm workers, and the homeless have special housing needs which may not be addressed by the conventional housing market. As required by State guidelines, the shelter needs of these special groups are discussed in this section.

Elderly

According to the 1990 Census, 23.5 percent of Redding's households are headed by persons 65 years of age and older. Updated by 1998 household estimates, this means in Redding 7,740 households are headed by a person 65+ years of age. Approximately 71.6 percent are homeowners (5,542 households in 1998) and 28.3 percent are renters (2,190 households in 1998).

The 1990 Census reported that 61.2 percent of the elderly household had incomes at or below 80 percent of the area median, of these, 34 percent were either

extremely low- or very low-income. Of all very low-income renters, approximately 26.4 percent were reported to be elderly. Of all extremely low-income renters, approximately 14 percent were reported to be elderly. Within these two groups, 77.6 percent report overpaying for housing. Of all low-income renter households, 17.4 percent were elderly. Of these, 67.1 percent reported overpaying for housing with an equally high number reporting other types of housing problems. Approximately 65.6 percent of all very low-income homeowners were elderly; and of these, 58.7 percent reported overpaying. Due to the disproportionate number of lower-income households within the elderly population, affordability of housing tops the list of critical housing needs for this group.

Another housing issue which faces many elderly households is the deterioration of their existing shelter. Homes purchased when incomes were in a higher bracket are now unable to be maintained with a smaller retirement income. Many single-elderly householders find themselves facing the loss of their home due to a financial inability to maintain it. According to the 1990 Census, approximately 82.4 percent of extremely low-income elderly homeowners and approximately 51.5 percent of very low-income elderly homeowners reported experiencing some housing problems. There is an ongoing need for continued rehabilitation assistance targeting lower-income homeowners in general and the elderly component of that population in particular.

Elderly households also have a special need for housing accessible to public transportation, community medical facilities, retail centers, and possibly with greater than normal security. This group on the whole is less mobile than the general population and accessibility of the above listed facilities and services is crucial to their ability to reside in any particular location.

Several housing complexes located in Redding were developed specifically for the elderly population. Two complexes, Pilgrim House with 49 units and Tree House Senior Apartments with 63 units, reserve all units for very low-income seniors or handicapped persons, due to requirements of the complexes' long-term financing, (the HUD 202 program). Another, River Oaks Retirement Center, is obligated to keep 20 percent of its 100 units available to lower-income seniors. This is a condition imposed by the terms of the financing source for the project (Multi-Unit Rental Housing Revenue Bonds issued by the Redding Housing Authority). In 1995, the historic Lorenz Hotel, located in Redding's Downtown, was completely rehabilitated by HUD and subsequently sold to a local nonprofit organization, *Shasta Housing Development Corporation* (SHDC). This facility now provides 78 one-bedroom efficiency units for very low-income elderly households at affordable rents. Congregate meals and supportive services for the residents are available on site. The hotel is also in close proximity to medical, retail, and other resources. As of December 1998, all units in the hotel were occupied.

There is an ongoing need for continued community support for the development of additional rental units coupled with supportive services targeted to the very low-income elderly population.

Persons With Disabilities

The special housing needs of the handicapped/disabled population of the area are primarily concentrated in two areas: (1) availability of affordable units; and (2) accessibility within the housing unit based on individual disabilities. *Far Northern Regional Center* (FNRC), a nonprofit agency in the Redding area that works exclusively with the developmentally disabled population, has stated that these are the two most pervasive housing problems facing the area's handicapped population.

It has been difficult to find accurate data which represent the total handicapped population in Redding with special housing needs. Most agencies which serve this population specialize in a particular type of disability or age group and do not have the capacity to collect overall population data. Information gathered by the Census is limited. In 1990, 17.9 percent of the general population 16 years of age or older reported either a work-related disability, a mobility limitation, or a self-care limitation. No information is provided which indicates how many of this population are homeowners, renters, or at which income level.

All handicapped/disabled individuals do not have special housing needs. However, it is generally accepted that many individuals with a disabling physical handicap require some degree of modification to their housing unit based upon the limitations of their individual handicap.

In 1984, Title 24 of the State Uniform Building Code mandated that all multiple-family residential construction projects containing in excess of five units under construction after September 15, 1985, would conform to specific disabled adaptability/accessibility regulations. In 1988, the Federal government enacted the U.S. Fair Housing Amendment Act, also with the intent of increasing the number of rental units being built which would be accessible to handicapped individuals. In July 1993, the State of California issued "California Multifamily Access Requirements" based upon the Act. Unfortunately, the actual increase in the number of handicapped-accessible units available on the current rental market has been small. According to City Building Division officials, less than 2 percent of the multiple-family units being constructed are, in fact, handicapped accessible. In today's rental market, little if any actual incentives exist to encourage a landlord to cover the extra expense of converting these "adaptable" units to "accessible" units.

The housing needs of several other categories of disabled persons including those with HIV/AIDS; developmentally disabled persons, including the mentally retarded; and the mentally ill are typically not addressed by Title 24 regulations. The housing needs of persons with these types of disabilities, in addition to basic affordability, range from needing slight modifications of existing units to the need for a variety of supportive housing arrangements. Some of this population can only live successfully in housing which provides a semi-sheltered, semi-independent living state, such as clustered group housing or other group-living quarters; others are capable of living independently if affordable units are available.

FNRC reports 925 active adult clients residing in Shasta County as of December 1998. FNRC estimates that 65 percent (601 persons) could successfully transition to independent living situations with appropriate supportive services. FNRC anticipates that the number of individuals with developmental disabilities who desire to live independently within the community and would be able to accomplish that goal with supportive services, will continue to grow. An increasing number of accessible affordable apartments in a variety of sizes (single-room occupancy units [SROs], one-, and two-bedroom), rental homes, first-time homebuyer opportunities, and direct rental subsidies are needed to address the needs of this population. There is also a need for retrofitting units for handicapped accessibility for both renters and homeowners.

The *Association For Retarded Citizens* estimates that between 1–3 percent of the general U.S. population has a developmental disability. Assuming that the prevalence of persons with developmental disabilities is the same in Redding as in the general U. S. population, approximately 785–2,356 persons with developmental disabilities resided in the community in 1998.

Group-home living quarters for a variety of specific disabled clientele groups have traditionally been found intermixed within Redding's residential neighborhoods. Larger single-family homes are purchased or leased by the supporting agency and house a small group of handicapped clients along with support personnel. The availability of these larger (4–5 bedroom) homes is diminishing, as well as becoming cost prohibitive to purchase and/or lease. By local zoning ordinance, residents are limited to six or fewer in number per facility if located within standard single-family zoned neighborhoods.

A fact that compounds the housing problems of the disabled population is that many fall into several of the special needs categories. Many of Redding's disabled are also elderly and/or single individuals. Many of these households require units with a second bedroom for live-in attendant care. The larger units are correspondingly more expensive to rent, making housing costs excessively expensive for fixed-income households. Standard move-in costs for rental units in this area include first and last month's rent and a substantial security deposit. These amounts are prohibitive to a lower-income household, even if an affordable unit is located.

Large Families

HUD defines "large family" as a family consisting of five or more members. According to the 1990 Census, large families make up 8.5 percent (2,799 households in 1998) of the total households in the City. Approximately 52.7 percent (1,475 households in 1998) are renter households and 47.3 percent (1,324 households in 1998) are homeowners. As discussed in the previous section on "Overcrowding," as income decreases and family size increases, more and more families reside in overcrowded conditions. There exists in Redding a shortage of large (4+ bedrooms)

affordable rental units suitable for housing a "large" family. The current rent figures for the few units of this size make them unaffordable to lower-income families.

The primary housing need for large families is the development of additional affordable housing units with 4+ bedrooms.

Female-Headed Households

According to the 1990 Census, 30.6 percent of all households in Redding were reported to be headed by a female (10,078 households in 1998). Of these households, 30.2 percent (3,044 households in 1998) have minor children in the household. The Redding Housing Authority reports that more than 55.7 percent of the households currently on the waiting list for subsidies are headed by females.

According to the housing report, "Grasping at the Dream, California Housing: Who Can Afford the Price?" prepared by the California State Senate Office of Research in June 1990, several expert sources stated that female-headed families are disproportionately affected by high housing costs and are possibly the group with the most extensive housing needs. Nationwide, two-thirds (66 percent) of all low-income renter families with children are composed of a female single parent and her children.

In addition to affordability issues, much of this group has an added burden of locating units which are suitable for raising children. Features such as an adequate number of bedrooms, play yards, fencing, and a physically safe neighborhood are critical issues to the well-being of a family. Most new rental housing is being built with two or fewer bedrooms. As stated previously, according to City Building Division records, of the 245 new multiple-family units which have been constructed during the 36-month period, January 1996 through December 1998, 92 percent (225) had two bedrooms or fewer. Existing rental units in an affordable price range are typically located in older, less desirable neighborhoods.

Continuation of programs such as Family Self-Sufficiency and affordable housing new construction efforts will help address this group's need for decent, affordable larger units, as well as provide access to supportive services, such as child care, which are vital to families with children.

Minorities

The breakdown of Redding's population by ethnic group is presented in an earlier section of this document, "Income and Ethnicity." The housing needs of these groups are, for the most part, identical to those of nonminorities in Redding. All low- and moderate-income persons, regardless of ethnicity, face the major problem of housing affordability and secondly, the issue of housing availability. Housing problems existing solely because of race do not appear to be an issue in the community.

Farm Workers

Redding is located at the northern end of the Sacramento Valley, which is above the major agricultural areas of California. In 1990, agricultural employment comprised only 2 percent of the total wage and salary employment in the entire County. This category of employment, in addition to containing traditional farm work, includes those individuals employed in the forestry industry. Individuals employed in the forestry industry typically have permanent housing they return to on a daily basis or are housed by the company at the various job sites, the majority of which are located in the mountainous areas outside the County. The primary types of traditional farm work in Shasta County are jobs related to strawberry plant processing, potato harvesting, and apiary (bee-keeping) work.

According to the *State Employment Development Department's (EDD)* Agricultural Specialist for Shasta County, within the Planning Area of the City of Redding, there are no agricultural operations which use temporary, seasonal farm workers. The *Region 2 Office of Migrant Child Education* also reports that it does not perceive a need for specific housing for farm workers in the immediate Redding area. Both of these service providers stated that the vast majority of farm workers residing in this area are permanent, not migratory, residents. According to both sources, *EDD* and *Migrant Education*, many of the families employed in farm work are of Hispanic or Southeast Asian heritage. Because these ethnicities tend to have larger families, the difficulties described in "Large Families" and "Overcrowding" would apply. These problems would be compounded with any communication difficulties related to non-English-speaking households. In order to mitigate this last difficulty on City-sponsored

programs, the Redding Housing Authority has access to translators for many of the commonly spoken Southeast Asian dialects, as well as Spanish, if needed. It appears that except for those problems noted above, the housing needs of households employed in agriculture do not differ from other households of comparable income employed elsewhere in this area.

Persons or Families in Need of Emergency Shelter

Article 10.6 of the Government Code requires local governments to plan for the provision of shelters and transitional housing for homeless persons and families. In addition, all localities must designate sites suitable to accommodate facilities capable of meeting the identified need.

The following discussion attempts to identify those in the population who are currently in need of emergency shelter, and project an estimate of the number of persons and families who are considered to be in the "at-risk" category. This last group would be individuals and families whose current housing situation is so fragile that the likelihood of their requiring emergency shelter in the immediate future is high. A summary of existing programs and services available in the community targeted to the homeless and at-risk population is also included.

The 1990 Census was the first national effort taken to enumerate the homeless population. Based upon figures from the 1990 Census, the homeless population count in Redding as of April 1990 was 614 (0.9 percent of the general population). Of these, 282 (46 percent) were unsheltered and 332 (54 percent) were counted in shelters. Of the unsheltered, 14 percent were estimated to be under the age of 18. Of the sheltered homeless population, almost 34 percent were under the age of 18. The census data also indicates that in Redding, the majority of homeless, both sheltered and unsheltered, are white (86.5 percent). According to the State in its Comprehensive Housing Affordability Strategy (CHAS), crude estimates of statewide homelessness on any given day range from 0.5 to 1.0 percent of the general population.

It is difficult to accurately document the extent of the homeless condition in the area. Service providers generally are working with specialized segments of the total homeless/at-risk population. Overlap among clients occurs frequently as many of this population have multiple unmet needs.

Homelessness, by its very definition, implies an absence of basic necessities. Lack of shelter typically goes hand in hand with lack of adequate food, clothing, transportation, and steady income. In addition to the portion of the whole which might be double or triple counted, there also remains a portion of the whole which is more likely not to be counted at all. Those individuals who choose to separate themselves from organized society's efforts to help them remain uncounted.

Little communitywide data is available to accurately tally the various categories of homeless persons. Single men, at one time considered to be the primary component of the homeless population, today comprise only one element of the homeless population. Statistics from the 1997–98 winter season for the Armory shelter operated by the *Shasta Homeless Shelter Coalition*, which serves singles as well as family groups, reported unduplicated individuals served throughout the winter season, December 1, 1997—March 15, 1998, totaled 435, of which 289 (66 percent) were single males. Family groups made up 34 percent of those served.

Complete local statistics do not exist which count the number of homeless with mental illnesses, those with alcohol or drug addictions, those diagnosed with AIDS or related diseases, those fleeing domestic violence, homeless youth, or any other specific subgroup. Program statistics are available for most of these groups but these only address the numbers served through various available programs, not the total population at large. As mentioned previously, overlap among clients between agencies occurs frequently as the vast majority of homeless have many unmet needs.

While national statistics should be used cautiously when attempting to identify a local need, for the following categories no comprehensive local statistics are available.

- National statistics generally indicate that approximately 20 percent of the homeless adult population have had at least one hospitalization for mental illness and approximately 20 percent of the currently homeless show signs and symptoms of mental illness. Approximately the

same percentage show current signs and symptoms of mental illness and abuse alcohol or other drugs.

- Within the national homeless population, it is estimated that about 35–40 percent of homeless adults have at least one indicator of alcohol/other drug abuse.

- Nationally, it has been estimated that 50 percent of homeless women and children are fleeing domestic violence.

- It is estimated that nationally, approximately 15 percent of the adult homeless population has HIV/AIDS.

It is even more difficult to tally the at-risk portion of the population. These people represent a potentially huge addition to the overall homeless population. On the verge of homelessness, many of these at-risk people are in a constant state of flux between the two designations. The largest element of the at-risk population is made up of lower-income families, tenuously employed or relying on public assistance who are currently over-paying for housing. A slight over-balancing in any area of their lives can push them into homelessness. As stated in an earlier section, the 1990 Census reports that over 86.5 percent of extremely low- and very low-income households are paying over 30 percent of their income for housing, 59 percent reported paying over 50 percent of their income to sustain shelter. Translated into 1998 household figures, this means approximately 6,287 households are at risk for homelessness because of high housing costs.

An additional at-risk population group that transcends income categories is made up of those households experiencing domestic violence or abusive relationships within the family group. These households can "explode" at anytime, fracturing the family unit and its support structure. Those running from the abusive situation usually are the female and any dependent children. As mentioned previously, it has been estimated that 50 percent of homeless women and children nationally are fleeing domestic violence. The Redding Police Department reports that they responded to 967 calls pertaining to domestic violence in 1998, up slightly from the 925 calls responded to in 1996. According to a report from the U.S. Senate Judiciary Committee, *Violence Against Women: A Week in the Life of America*, for all reported crimes of domestic violence, there may be three times as many unreported crimes of domestic violence. The report estimates that a woman has between a 20–30 percent chance of being physically assaulted by a partner or ex-partner during her lifetime. Nationwide, there is some indication that isolated rural areas such as Redding and Shasta County experience even higher incidences of domestic and family violence than do more urban areas. The *Shasta County Women's Refuge* provided shelter to over 600 women and children during the 12-month period (7/97–6/98).

Another population group which is at risk for homelessness are children who have aged out of the foster care system. At age 18, public financial support through the foster care system is withdrawn. Many of the victims of this policy are still in high school with no means of personal financial support. *Northern Valley Catholic Social Service* operates the Independent Living Skills Program for this population. The Program is able to work with approximately 50 individuals annually. According to *Shasta County Child Protective Services*, approximately 355 foster children, aged 16 years or older, currently reside in Shasta County. These individuals are at risk and could potentially benefit from affordable housing with a supportive service component.

Many disabled persons are also severely at risk for becoming homeless due to a variety of factors, the foremost of which is the poverty level income many subsist on. Other factors can include health and behavioral issues. Many of the most at risk for homelessness in the disabled population are very often hard to house. There can be an impairment of mental or emotional functioning to a degree that it interferes with the ability to meet the ordinary demands it takes to maintain permanent housing.

Current programs and resources available in the community to assist the homeless and at-risk populations consist of the following:

- The *Shasta County Social Services Department* assists homeless families through two programs. The first provides monetary assistance for shelter (up to 16 days) at local motels. The second provides monetary assistance to help with the move-in costs associated with securing permanent housing. Eligible costs are utility and

security deposits, as well as the last month's rent, if required. Social Services reports that they are able to provide the above assistance to all eligible families on a one-time-only basis. Approximately 450 families received assistance to help them secure permanent housing during 1998.

- Current emergency facilities to house victims of domestic violence are limited. The *Shasta County Women's Refuge's (Refuge)* emergency shelter, the only 24-hour emergency shelter for victims of domestic violence in Shasta County, provides 24 beds and some additional crib space. Up to 35 individuals can be sheltered at this facility on a nightly basis, if needed. When bed space is not available, local motels are used. The *Refuge* also offers a 12-month transitional housing/self-sufficiency program for battered women and their children. Presently, the transitional housing is a 1940s, 13-unit motel complex on the south side of Redding. Additional space and a more appropriate location for the facility are needed. The *Refuge* is in escrow to purchase an existing 12-unit, multiple-family property for this purpose.

- Year round emergency shelter is available for single men and women and children through the *Good News Rescue Mission.* For homeless men, this evangelical organization operates a 48-bed homeless shelter and an 18-bed transitional program. Homeless men can receive meals, showers, and a bed for up to 14 days on an emergency basis. The *Mission's* long-term residency program focuses on helping its residents overcome substance and alcohol addictions. In order to reside at the facility for more than 14 consecutive days, individuals must be willing to work towards ending the homeless "lifestyle"and commit to a minimum of one year in the long-term residency program. The *Mission's* program is designed to assist residents overcome alcohol/substance abuse problems, gain employment skills, and reach independence.

  House of Hope, a sister facility of the same organization, provides emergency assistance for up to 42 women and children per night and operates a 14-bed transitional program similar to the men's residency program.

  For the 1999 winter season, the *Mission* will provide the area's only emergency shelters. The 14-day maximum stay rule is not in effect during the winter season, which began November 1 and is anticipated to end March 1. The *Mission* has received permission from the Fire Marshal to provide overnight shelter to an additional 20 men and 10 women and children per night, if needed, during this period of time. Additional services currently being provided to the homeless and at-risk populations include the use of free shower facilities for nonresidents, operation of a free medical clinic, the provision of free clothing, and meal services three times per day. The *Mission* reports that they have been near capacity for shelter services this winter and have a waiting list for individuals to enter into the long-term program. They anticipate expansion of the long-term program during 1999 if additional facility space can be provided. In addition, the *Mission* will be purchasing a 12-unit older motel facility to house women and children graduating from the long-term program in early 1999.

- The *Shasta Homeless Shelter Coalition* provides a variety of services to the homeless and at-risk populations utilizing a continuum of care model. Services include: (1) emergency motel vouchers, (2) transitional housing, (3) deposit assistance, and (4) eviction prevention. Emergency motel vouchers currently are only available to those families or individuals unable to be served by the winter *Mission* facility due to its having reached capacity, or the size or composition of the family group, or health issues, or those who have already resided at the Mission facility in excess of one week. A limited number of transitional apartment units are available for those families or individuals who have been assisted either through the Mission facility or with motel vouchers for in excess of two weeks and who have agreed to a written case management plan. Families are given first priority for these units. Deposit assistance is available for those families and individuals who either have been participating in the transitional program or who can demonstrate ability to maintain permanent housing with little or no further services. Eviction prevention assistance is available to families that are currently housed and have an income source sufficient to maintain that

housing but have experienced an unusual situation resulting in the temporary loss of income.

Various private and governmental agencies provide limited emergency shelter to specialized client groups apart from the above-mentioned facilities. Shasta County Community Mental Health Services is able to temporarily house up to 16 client households each night, utilizing motel rent vouchers.

New transitional and emergency housing facilities must comply with current development standards and zoning requirements. Generally, transitional facilities would be allowed in all multiple-family residential districts pursuant to adopted development standards and dependent upon the type of facility proposed, i.e., mobile home park, apartments, boarding house, etc. Emergency shelters would be allowed in commercial districts upon issuance of a use permit for the project. The project review process ensures that common standards are applied to all projects. Conditions imposed during the process would be standardized, objective, and no more restrictive than those for similar projects, such as hotels, apartments, or boarding houses in commercial areas. The location of large vacant sites suitable for multiple-family development is depicted in Table 3 and Figure 2. These sites would generally be suitable for transitional facilities.

Commercial property often is the most expensive land classification within a community; however, there is commercial land that suffers from poor exposure or a less than desirable location and would be correspondingly less valuable. The market value is determined on a dollar-per-square-foot basis representative of the attractiveness of the property's location for business trade. Land in the more popular commercial core areas would very likely be too expensive for a homeless project. In Redding, less expensive commercial sites are available along the Highway 273 corridor and in the Lake Boulevard area which are adjacent to both medical and social services for the homeless. Under the City's Zoning Ordinance, apartments can be developed in commercial areas with reduced yard requirements and at densities up to 21 units per acre.

Current City zoning and land use ordinances do not pose an unreasonable constraint on the development of homeless facilities. Development of new homeless facilities in Redding suffers primarily from lack of sufficient funding for projects.

In the past, existing structures have primarily been utilized for both emergency and transitional facilities, such as the National Guard Armory, older motels, and older commercial buildings. Often, acquisition and rehabilitation of under-utilized or economically obsolete structures, such as older motels, single-room occupancy hotels, or older apartment buildings, is more financially feasible than new construction.

It is important to note that the long-term success of any program for the homeless lies at least in part with its ability to successfully address a wide range of nonhousing issues. Successful transitional housing programs must contain a significant supportive service component that can identify and assist homeless clients to overcome individual social, personal, and economic problems. These problems include lack of job skills, lack of money management skills, significant drug and alcohol abuse, lack of reliable child care, lack of transportation, insufficient mental and physical health care, and other personal problems.

Long-range alleviation of homelessness also relies upon the availability of affordable housing in the community and availability of jobs which pay adequate wages. Without units available at an affordable price, many families who have struggled for months to overcome personal and economic problems will find themselves once again back on the streets. For lower-income at-risk households, excessive housing costs often act as the agent which pushes them into homelessness. Without employment opportunities, it is difficult if not impossible to sustain stable living arrangements, even when that housing is considered affordable.

Based upon testimony received during a Housing Workshop held by the Redding Redevelopment Agency in July 1998 to discuss community housing needs and staff research with the area's homeless service providers, there exists a need for the following:

- Transitional housing facilities able to house a minimum of 25 families.

- Transitional facilities or other supportive housing targeting aged-out foster youth.

- Direct financial assistance with the costs related to securing permanent housing such as security and other required deposits.

- A year-round emergency shelter which can house 60–75 individuals, including families, and which can provide a daytime facility for the coordination of social services; a location for the receipt of mail and phone messages (particularly from job prospects); and an on-site, day-care center for the use of homeless children while parents are seeking employment, accessing social services, attending training, or arranging for transitional or more permanent housing.

- Additional supportive housing, whether transitional or permanent in nature, targeted to homeless individuals and families that are suffering from mental illness, HIV/AIDS, drug and alcohol addiction, or other substantial symptomatic problems that need to be brought under control.

- Overall increased availability of affordable housing in the community.

TABLE 3

MAJOR VACANT RESIDENTIAL SITES

Site ID	Approx. Acres	Proposed General Plan	Zoning*	Description
1 & 2	15-20 acres	10–20 u/a	U-FP	Generally flat terrain. Two sites are to the west of I/5 along Cascade Blvd. Two sites are to the east of I/5 along Twin View Blvd. Development in this area is constrained by the need to have utility services (water, sewer) extended.
3	7 acres	10–20 u/a	R3-25-F & C2	Two separate sites—approximately 3.5 acres each. Both with Lake Blvd. frontage, close to services, transit, etc. No physical constraints. Existing commercial zoning on one site inconsistent with proposed General Plan though would allow residential development.
4	37.35 acres	10–20 u/a	R1 & R4	Approximately 15 net acres due to steep terrain and flood plain constraints. All services available to site.
5	4.4 acres	10–20 u/a	RM-9 & C3	Multiple parcels currently held in public ownership. All services available to site. Flat terrain, access off of Railroad Ave. and West St.
6	13 acres	10–20 u/a	U	Two sites, 8 and 5 acres respectively. Generally flat terrain. All services available to both sites. Utility easement across eastern edge of smaller site. Good access to both sites.
7	30+ acres	10–20 u/a	RM-6 & U	Generally flat terrain. Good access off of main arterial. Close to all services, transit, etc.
8	33 acres	10–20 u/a	U, U-FP	Multiple adjoining parcels on the south side of Branstetter Lane. Flat terrian, services available, close to transit.
9	13.21 acres	10–20 u/a	R1, R2 & C2	Good access, flat terrain, all services available. Close to retail and transit. Developing area surrounded by both multifamily residential and commercial.
10	6 acres	10–20 u/a	U	Similar to Site 9. Good access, flat terrain, all services available.
11	20 acres	10–20 u/a	U, U-FP	East of Twin View Blvd. off of Poppy Hills Dr., services available, flat to rolling terrain.
12	20 acres	10-20 u/a	U	North of Cypress Ave. slightly east of Churn Creek Road. Three separate sites, approximately 11 acres, 8 acres, and 3 acres. Flat terrain, all services available, close to transit.
13	11 acres	10-20 u/a	RM-6, RM-12	Residential portion of larger site currently undergoing annexation. Located north of Cypress Ave. east of Victor Ave. Upon annexation, all services available. Flat terrain, close to transit.
14	44 acres	10-20 u/a	U, U-FP	Multiple adjoining parcels on south side of Hartnell Ave. between Shasta View Dr. and Argyle. All services available, flat terrain, close to transit.
14	2.5 acres	20-30 u/a	R-3, R-4	Multiple small scattered in-fill sites. All close to transit, flat terrain, all services available.

* Current zoning may be inconsistent with proposed General Plan designation. See discussion regarding zoning ordinance update in the "Governmental Constraints" Section.

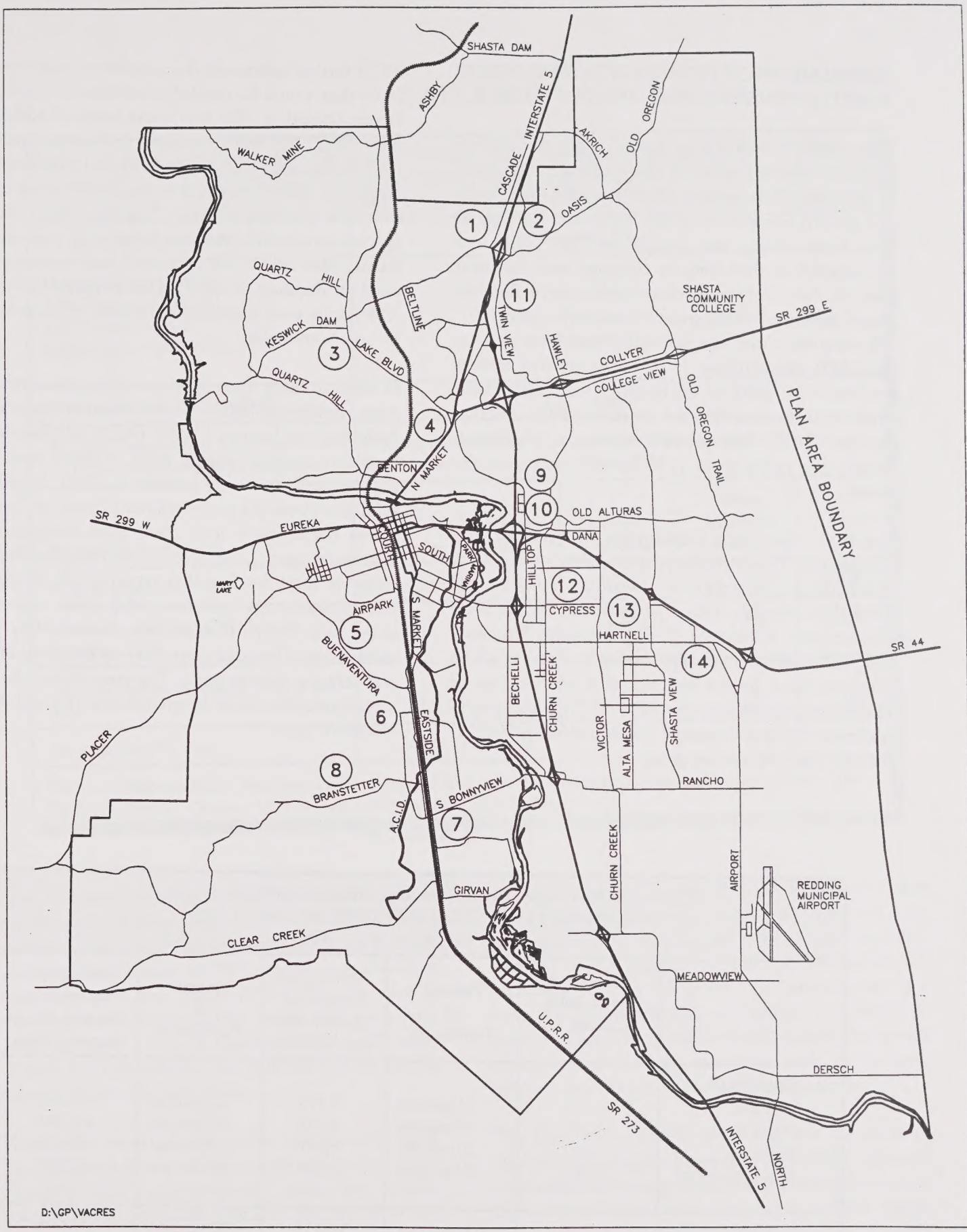


Figure 2 Major Vacant Residential Sites

ASSESSMENT OF FUTURE HOUSING NEEDS BASED UPON REGIONAL SHARE FIGURES

The regional housing share figures used in this analysis were provided by the State Department of Housing and Community Development (HCD) in 1991 based upon the growth experienced in the region and throughout the State during the decade of the 1980s and anticipated at that time to continue into the next decade. As current population numbers show, Redding has experienced slower growth than predicted in 1991. Housing starts over the past eight years have also not met 1991 expectations. HCD has stated that no new regional share numbers will be generated until the next mandated Housing Element revision in 2003. For that reason, HCD has advised that the population projections provided in 1991 should continue to be used.

In 1991, the State Department of Housing and Community Development projected that by July 1997, Redding's population would consist of 34,433 households. (As of January 1, 1998, the State Department of Finance (DOF) estimated that only 32,935 households actually resided in Redding.) The regional share figures resulted in a net increase of 7,098 new households over the 1991 DOF population estimate. Table 4 illustrates this household projection broken down by income group.

HCD further estimated the number of new housing units that would be needed to adequately house the larger population. The unit count included additional units HCD felt were necessary to address vacancy deficits identified by HCD in 1991 and a replacement factor for units anticipated by HCD to be demolished over the planning period. Together, these factors (population growth, vacancy factor, and replacement factor) resulted in the projected basic construction need for Redding of 8,699 additional units. Of these, 3,566 units were identified as needed to house lower-income households.

In order to bring these figures current, the number of actual residential units that have been constructed in Redding since January 1, 1991 (HCD calculations are based on existing housing units, vacancy rates, and population figures as of January 1, 1991), have been subtracted from the projected need figures in Table 5. These constructed units have been designated by income category. Units constructed utilizing Federal, State, or local funding that required affordability of project units; new homeownership units targeted to low- and very low-income households; and manufactured housing units make up the count of low- and very low-income units. The remainder of the new units constructed were designated moderate and above-moderate units.

TABLE 4

California State Department of Housing and Community Development
HOUSEHOLD PROJECTION FIGURES FOR REDDING
January 1, 1991 to July 1, 2003

	Number of Households January 1, 1991	Percent of Population	Anticipated Number of Households July 1, 2003	Percent of Population	Anticipated Increase in Households by Income Group
INCOME GROUP					
Very low	6,014	22 percent	7,575	22 percent	+1,561
Other lower	5,193	19 percent	6,542	19 percent	+1,349
Moderate	5,467	20 percent	6,887	20 percent	+1,420
Above moderate	10,667	39 percent	13,429	39 percent	+2,768
TOTAL	27,341	100 percent	34,433	100 percent	+7,098

Source: California State Department of Housing & Community Development

TABLE 5

California State Department of Housing & Community Development
BASIC CONSTRUCTION NEEDS FOR REDDING
January 1, 1991 to July 1, 2003

BY COMPONENTS: (*)	Housing Units
Household Increase	7,098
1991 Vacancy Need	740
2003 Vacancy Need	439
Replacement Need 1991–2003	422
TOTAL PROJECTED NEED	8,699

(*) Basic Construction Needs were calculated using the following: A homeownership percentage of 53.5; a vacant, not-for-sale-or-rent percentage of 2; and an annual removal rate of .002.

BY INCOME GROUP:	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total Units
Need as of January 1991	1,914	1,652	1,740	3,393	8,699
Constructed January 1991 through December 1998	102	72	1,740	2,741	4,655
Units Needed from January 1999 to July 2003	1,812	1,580	0	652	4,044
Units Needed Per Year	403	351	0	145	899

Source: California State Department of Housing and Community Development Regional Housing Needs Plan for Shasta County, October 1991; updated 1999 by the City of Redding.

Over the past eight years, private construction of residential units has averaged approximately 580 units per year. This is far slower that the 1,200 units per year pace predicted locally in 1991. Looking at the most immediate past four years, 1995–1998, the pace is slower yet, averaging slightly under 445 residential units per year. City of Redding Building Division officials feel it is unlikely that this rate will accelerate substantially in the near future.

Historically, most private market single-family units have been constructed in the mid to upper price ranges. Privately built multiple-family units are usually constructed as for-profit ventures and the rents are structured based upon existing market conditions. In a rental market such as Redding's with high vacancy rates, very few new units are being built by the private market and, those that are, are among the most expensive to rent. The construction of units affordable to the community's lower-income households will most likely come about through public-private partnerships. Based upon past experience, it is likely that additional affordable projects will require the creative use of a variety of sources of financing. Federal, State, and local public funding sources will be highly sought after as will nontraditional private resources such as banking industry lending consortiums and grant funds.

The City will continue to pursue the provision of affordable housing for lower-income residents through a multifaceted strategy which includes rehabilitation of the existing housing stock, provision of direct rental housing subsidies, operation of supportive housing programs which train families to be economically self-sufficient, preservation of existing affordable housing units, as well as facilitating the construction of new,

affordable units. Program efforts to facilitate new construction of affordable units are discussed in detail in the *1999–2003 ACTION PROGRAM* section. As can be readily seen from the tables, the projected need over the next four years is far greater than the currently identified sources of financing for affordable projects.

LAND INVENTORY & SITE AVAILABILITY

Residential Classifications Holding Capacity; Inventory of Major Vacant Sites

Housing element law requires the element to contain an identification of land in the community that is suitable for residential development commensurate with the community's share of the regional housing need for all income levels. Table 6 reflects the total current acreage count for all categories of residentially classified land, the potential number of units which could be developed within each category, and the estimated population able to be housed under each category, as reflected in the revised General Plan Diagram. As can readily be seen, there exists sufficient residential land to accommodate the number of units anticipated to be needed to house the overall population increase projected in the HCD regional share figures for Redding.

As discussed in previous sections regarding existing and projected housing costs within the City of Redding, moderate- and median-income households can generally find affordable housing within the single-family or lower-density (6–10 units per acre) multiple-family categories. The development of housing affordable to lower-income households is generally considered to be more likely to occur at higher densities. Development at higher densities can, under certain circumstances, result in overall lower per-unit costs. These savings would be the result of potentially lower per-unit/per-acre land costs; possible lower per-unit, on-site costs for shared building components such as common walls, common tenant areas, parking, landscaping, etc.; and potentially lower per-unit costs for required off-site infrastructure such as street improvements or utility extensions. The savings, conceivably, could pass down to future residents as correspondingly lower housing costs.

TABLE 6

General Plan Holding Capacity
Residential Land Uses

Land Use Designations	Assumed Typical Residential Density	Acres	Dwelling Units	Population[1]
RESIDENTIAL (dwelling unit per acre [du/a])				
1 du/5 ac	1 du/5 ac	5,747	1,149	2,713
1 du/1 to 5 ac	1 du/2.5 ac	9,645	3,858	9,105
1–2 du/a	1.5 du/a	3,985	5,978	14,107
2–3.5 du/a	2.75 du/a	12,489	34,345	81,054
3.5–6 du/a	4.75 du/a	2,160	10,260	24,214
6–10 du/a	8 du/a	1,700	13,600	32,096
10–20 du/a	15 du/a	1,021	15,315	36,143
20–30 du/a	25 du/a	33	825	1,947
TOTAL	N/A	36,780	85,330	201,379

[1] Assumes an average of 2.36 persons per dwelling unit.

NOTE: Development of mixed-use projects within the "Mixed Use Overlay" Districts and in the Downtown area would increase the buildout population by approximately 10,000 to 15,000 persons.

Two residential land classifications, 10–20 units per acre and 20–30 units per acre are utilized by the General Plan to identify locations where higher density residential development would be appropriate. Generally, developments in these ranges would be located on arterial or collector streets, served by public transit. The highest densities would generally be near employment centers and retail facilities. Construction at these densities on slopes exceeding 8 percent would be difficult and cost prohibitive, therefore, the majority of this type of land is relatively level.

Table 5 previously identified a need to develop 3,392 new units over the planning period to adequately house the anticipated growth in lower-income households. The development of 3,392 units requires a minimum of 339 acres of land at 10 du/a, 226 acres at 15 du/a, and 170 acres of land at 20 du/a.

Based upon the General Plan Diagram for the revised General Plan, Table 7 identifies the total gross acreage within the two higher density land classifications, the amount of undeveloped acreage currently available for development, and the number of dwelling units that could potentially be accommodated both in the entire planning area and the existing City limits. As can be seen from the table, over 467 acres of vacant land is currently available at these densities. Using the midrange density calculation as the baseline, between 7,037-9,375 additional units could be constructed at buildout of the currently available vacant land. There is sufficient vacant land located within the existing City boundaries to provide for the construction of between 6,302-8,395 of these units.

The inventory of vacant sites classified at these densities is sufficient to provide for the construction of substantially more units than have been projected to be needed to adequately house the anticipated population growth over the planning period. The number of units potentially able to be constructed has been determined based upon total gross acreage within each category. Local development standards addressing parking, landscaping, setbacks, or open space do not require a deduction from gross acreage for these items when calculating the actual development potential of an individual site. Individual site characteristics such as slope or wetland delineation, however, might reduce the amount of units able to be constructed on specific sites and would be taken into consideration when actual development occurs. Due to the siting of the higher density classifications primarily on level terrain, very little reduction in gross acreage is anticipated in this area. Wetland issues are also not anticipated to affect most of the land in these categories. Table 7 clearly indicates that sufficient land is available within the higher density classifications to accommodate the anticipated population growth during the planning period and into the future.

As previously noted, Table 3 and Figure 2 identify 15 of the more significant multiple-family vacant parcels by location, general plan designation and zoning, acreage, and development characteristics. The parcels identified in the table and map all lie within the existing City limits or are currently undergoing annexation. All are on or adjacent to major arterials. The sites have access to public transportation, and to retail and other service facilities. The terrain varies but is generally level to slightly sloping, allowing for potential development of the maximum number of units. Parcels in the far northern portion of the City are somewhat constrained by high off-site infrastructure costs related to the extension of water and sewer services. The City and the County have initiated the process to establish a joint redevelopment project in the vicinity of these properties. Upon adoption, redevelopment resources could assist with the cost of infrastructure improvements making development more feasible.

The sites identified at the highest density are all located slightly northeast of downtown Redding within the urban core and can be characterized as in-fill sites. These sites are all flat with full urban services available.

Identification of Sites Appropriate For Intensification of Use

In addition to the vacant sites identified as suitable for new development of multiple-family units, sites located within several older residential neighborhoods in Redding might be suitable for redevelopment to higher density use. In December 1998, the Redding Redevelopment Agency authorized the development of master plans for several of Redding's older residential neighborhoods. It is anticipated that as part of the planning process, higher density residential uses will be considered. The neighborhoods to be studied include the Parkview Neighborhood, the Martin Luther King, Jr. Neighborhood, and residential neighborhoods adjacent to the Downtown business core. Additionally,

TABLE 7

HIGHER DENSITY CLASSIFICATIONS HOLDING CAPACITY							
Land Use Designation	Total Acres	Vacant Acres within City's Sphere	Vacant Acres within City	Potential Additional Dwelling Units			
				Sphere	Sphere	City	City
RESIDENTIAL (dwelling unit per acre [du/a])							
10-20 du/a	1,018	465.0	416.0	15 du/a	20 du/a	15 du/a	20 du/a
				6,975	9,300	6,240	8,320
20-30 du/a	33	2.5	2.5	25 du/a	30 du/a	25 du/a	30 du/a
				62	75	62	75
TOTAL	1,051	467.5	418.5	7,037	9,375	6,302	8,395

as part of the revised General Plan, a Mixed Use Core classification has been applied to the entire Downtown area. This classification allows for residential densities up to 50 dwelling units per acre. Under the Mixed Use Core designation, residential uses could be combined with a variety of nonresidential uses within a single, multistoried building. At this density, there would be an emphasis on strong pedestrian orientation, with all amenities located conveniently within walking distance. It is anticipated that in order to achieve this density and optimum configuration, redevelopment of existing Downtown street patterns and land uses would be necessary. The development of a specific plan for the Downtown, incorporating the mixed-use concept, has been approved by the City Council and is expected to be adopted by December 2000.

INFRASTRUCTURE STATUS AND LIMITING FACTORS

The City of Redding provides the majority of utility services to residential units within the City limits including water, electrical service, solid waste disposal and waste water services. A summary of the current status of these services and future capacity is provided below. Utilities to newly annexed property in the City are transitioned over time from private vendors to City services.

The City has owned and operated the community's primary water system since 1938. The City water utility supplies water to the majority of City residents and businesses. Portions of the City continue to be served by three independent water districts, Shasta, Bella Vista, and Centerville. Coordination between the City and the various districts is generally provided by "annexation agreements" which ensure that systems and fire flows are constructed and maintained in accordance with City of Redding standards. The principal source of supply for the City's system is the Sacramento River, with secondary reliance on a series of deep water wells, and Whiskeytown Lake via the Spring Creek conduit. Annual delivery capacity in 1998 was over 40,000 acre feet of water from all sources (sufficient to accommodate approximately 139,000 people). The City operates the system as a self-supporting utility. Following the completion of the General Plan process, the 1989 Water Master Plan will be updated to reflect new growth projections contained in the new General Plan. The current capacity is sufficient to accommodate the level of population growth anticipated during the planning period of the Housing Element. Delivery system expansion will be dependent upon development activity and availability of funding.

The City of Redding owns, operates, and maintains a power generation, transmission and distribution system

within its City limits. The City purchases or produces wholesale power and delivers it to its customers. All of the power is received at three delivery points: the Western Area Power Administration's (Western) Keswick Dam 115kV switchyard, the Western/City Airport 230/115kV Substation, and the City-owned 13.8kV Redding Power Plant. Power is transmitted from these delivery points over the City-owned 115kV bulk transmission lines to the City's distribution substations. In 1998, Redding served approximately 38,034 customers (meters). Of these, approximately 83.8 percent were residential units. To continue to provide electric service to both current and anticipated residents and businesses at the lowest possible rates, while maintaining system reliability in an environmentally responsible manner, the City actively pursues the development of new power resources.

The City of Redding provides all waste water services within the City limits. The City currently relies upon two regional wastewater treatment facilities, Clear Creek Treatment Plant and the Stillwater Treatment Plant, for all its wastewater treatment needs. The two plants have a current combined capacity to process 12.8 million gallons of wastewater daily, or 42,200 residential household equivalents. The Clear Creek Plant has been designed for future expansion up to 19.4 million gallons per day (mgd) (8.8 mgd currently) as City growth requires additional capacity. Stillwater has been designed for future expansions to 6.0 mgd in the 2003 and to 8.0 mgd in the year 2010, as future growth requires additional capacity. With proposed future expansions, the two systems will have sufficient capacity to accommodate population growth forecasted to occur during the planning period. It is anticipated that the Wastewater Utility Master Plan will be updated by the end of 1999 in conjunction with the adoption of the updated General Plan.

Solid waste disposal services are provided by the City at competitive rates for all City residents. Shasta County has contracted with the City for the management and operation of a jointly used landfill facility. Under existing State permits, the landfill has sufficient capacity to accommodate the disposal of solid waste at least to the year 2017. In 1995, the City completed construction of a new solid waste transfer station. The facility also has the capability of processing materials collected by curbside recycling programs and contains a household hazardous waste drop-off area and temporary storage facility, a drop-off area for recyclable materials, a green waste drop-off and processing area, and a composting area. The facility is designed to operate at a 750-ton-per-day (tpd) throughput, which is the anticipated peak tonnage at approximately 20 years of operation. In 1998, the facility processed and transferred an average of 257 tons of material each day.

All school districts within the City of Redding charge school fees to developers to assist with the cost of buildings and facilities to accommodate a growing student population. School capacity will continue to be an issue throughout the planning period. Several overcrowded area school districts have attempted recent bond issues to help finance facility expansion with mixed success. Several other school districts have reported declining enrollments over the past two years. These latter districts typically are serving a student population drawn from both inside and outside the Redding Planning Area and have little new development occurring within their respective district.

The City requires developers of all types of projects to contribute to the cost of providing streets, street lighting, curb, gutter, and sidewalk improvements, and other infrastructure, such as storm drains and sewer lines impacted by the development. Developer contributions can be in the form of impact fees or actual construction or improvement of affected infrastructure. The City also pursues all available State and Federal funds for these projects.

In summary, while cost factors to provide utility services, educational services, and an adequate transportation system will continue to increase over the planning period, all these elements will have adequate capacity to serve the anticipated growth during the same period, as long as adequate funding is available for necessary improvements and extensions.

GOVERNMENTAL CONSTRAINTS TO MAINTENANCE, IMPROVEMENT, AND DEVELOPMENT OF HOUSING

Housing affordability is influenced by factors in both the private and public sectors. Actions by the City can have an impact on the price and availability of housing in the City. Land-use controls, such as the implementation of the City's General Plan, land zoning, building code enforcement, and on- and off-site improvement requirements, as well as fees and exactions, permit processing, and other local actions intended to improve the overall quality of housing, may serve as a constraint to housing development. This chapter discusses these possible constraints to development and the actions the City will take or has taken to mitigate the negative effects.

LAND USE CONTROLS

General Plan

The City of Redding General Plan sets forth policies applicable to nearly all development. The Community Development and Design (CDD) Element of the General Plan and corresponding zoning provide for a full range of residential types and densities spread throughout the City. Each residential category includes a density range (minimum and maximum densities). Within the residential categories, density ranges from 1 unit per 5 acres to 30 units per acre. Within the Mixed Use Core designation, residential density may be permitted up to 50 units per acre. Variations in density and private market conditions will determine the types of housing produced. Within any given General Plan density range actual density will depend upon site characteristics, surrounding land use and the site layout.

The CDD Element of the General Plan contains 21 broad goals, each with specific underlying policy statements. The goals and policies when adopted, in conjunction with the Zoning Ordinance, will direct the form and substance of development activities occurring within the City over the next twenty years. Based upon these stated goals, new residential development ideally should accomplish the following: (1) further the achievement of a more compact urban form; (2) occur only with availability of essential services; (3) be compatible with the site's natural topography; (4) protect limited environmental resources; (5) enhance the community's image; (6) preserve existing neighborhoods; (7) assist in the development of transportation alternatives; (8) be distinctive, of high quality, and contribute to the positive image of the City; (9) improve pedestrian safety; (10) be reflective of the neighborhood in which it is located; and (11) contain aesthetically pleasing roadways. Not all development is expected to meet all these goals. In many cases there will be a balance struck between potentially conflicting goals. For example, achieving a more compact urban form leads to higher-density infill projects, but this must be considered in the context of preserving the character of existing neighborhoods. Some goals represent absolute thresholds that the community has requested new development adhere to, such as protection of environmental resources. Others are expressions of an ideal condition to be incrementally achieved over time, such as enhancement of the community's image, development of transportation alternatives, and contributing to overall community aesthetics.

Zoning

The Zoning Ordinance is the City's principal tool for effecting the land use proposals of the General Plan. Redding's Zoning Ordinance establishes various zoning districts which control both land use and development standards. Redding's Zoning Ordinance includes a wide variety of residential districts including both single- and multiple-family development, as well as numerous combining districts which serve to address special residential situations, such as accessory apartments, mobile homes, etc.

The City has adopted development standards as part of the Zoning Ordinance which address usable open space, slope density standards, and building setbacks. These provide for passive and active recreational opportunities, reduce hillside erosion and water course siltation, and protect the public health and safety by slowing the spread of fires and ensuring adequate light and air passage.

Development standards for single-family housing are largely incorporated in the Subdivision Ordinance, which addresses parks and open space, slope density standards, and street design. Development standards

for multiple-family housing is largely addressed in the Zoning Ordinance. The current Zoning Ordinance addresses building setback, height, separation, lot coverage, and minimum lot size requirements. Table 8 illustrates the general development standards required for various categories of residential development. These development standards are viewed as necessary to protect public health, safety, and welfare and maintain the quality of life, and are not considered constraints to the development of housing.

In order to ensure consistency with the new General Plan classification categories and proposed General Plan Diagram, the Zoning Ordinance text and map will be reviewed and revised as necessary. In December 1999, the City entered into a contract with an outside consulting firm to start this process.

Also, to implement policies in the CDD Element, following the adoption of the new General Plan additional residential development standards are proposed to be developed and incorporated into the City's Zoning Ordinance. Several of the anticipated modifications to the Zoning Ordinance would provide additional opportunities for development of affordable housing. These potential amendments include:

- Allowing duplexes and other residential dwelling types within appropriate single-family zoning districts under certain conditions.
- Allowing guest houses/second units in single-family residential districts consistent with Government Code Section 65852.2.
- Allowing reduced parking requirements for mixed-use projects.
- Creating an incentive package, possibly through amendment of the Zoning Ordinance, to encourage infill development.

It is anticipated that these amendments could have a positive effect upon affordable multiple-family development from the perspective of increasing overall project quality, improving accessibility, and increasing on-site amenities such as open space, parking, storage, landscaping and recreational facilities. To the extent that heightened design standards do not render a project economically infeasible, these standards would not act as a constraint to the development of this kind of unit. As discussed more fully later in this section, the City has adopted a Density Bonus Program pursuant to State law which allows for the reduction of development standards, if needed, to assist in the development of affordable housing units.

Building Code Enforcement

Building construction standards in Redding are based upon the 1994 Uniform Building Code. This code is updated every three years as per State requirements with subsequent adoption by the City. It is anticipated that the 1997 code will be adopted sometime in 1999. The City also utilizes the Uniform Plumbing Code, Housing Code, Electrical Code, Uniform Mechanical Code, and enforces Title 24 regarding accessibility and energy provisions. Generally, the City does not require stricter construction standards than are contained in these codes. However, a variety of code revisions have been implemented which address unit security, energy conservation, fire safety, and increased structural requirements based upon the area's winter climate. These revisions are not considered constraints to development as the cost factors in meeting the heightened requirements are minor. Redding does not enforce a stricter seismic code than required by State law.

Over the past eighteen months, the City has established a proactive approach to the enforcement of building code standards for existing dwelling units. In the past, existing units were inspected only when complaints were received by the City, or when an owner sought a permit for additional construction. In 1998, the City amended the Municipal Code to reflect the community's desire to address the problem of unsightly, unsafe buildings scattered throughout the community. The Code Enforcement staff of the Building Division are charged with the responsibility of identifying commercial and residential properties citywide that pose a serious threat to the health, safety, and welfare of the community and resolving the situation. Property owners are expected to comply with requests to cure identified code violations within a reasonable time frame or full abatement of the structure could occur. To the extent possible, all existing program resources are made available to interested owners to help resolve the code violation issues.

Code enforcement efforts support the stated General Plan goals of preserving and enhancing existing

TABLE 8

COMPARISON OF DEVELOPMENT STANDARDS REQUIRED UNDER VARIOUS RESIDENTIAL ZONING CLASSIFICATIONS

Zoning Classifications	General Plan Land Use Classifications	Minimum Lot Size/Coverage/ Height	Parking Requirements	Setback Requirements	Parks/ Open Space Requirements	Landscape Requirements
R-1 - Single Family Residential District	2 - 3.5 DUA 3.5 - 6 DUA	6,000 sq. ft. min. lot/max 40% coverage/max 30'	2 covered spaces.	F- 20' S - 5' R - 15'	Park fee of $325 per unit plus $27 per bedroom	1 15-gal. tree per 500 sq. ft. living area.
R-2 -Duplex Residential District	3.5 - 6 DUA	6,000 sq. ft. min. lot/max 50% coverage/max 30'	1 covered space p/unit plus 1 other space p/u.	F - 20' S - 5' R - 15'	Park fee of $217 per unit plus $27 per bedroom	Same as R-1
R-3 - Multiple Family Residential District	6 - 10 DUA 10 - 20 DUA	6,000 sq. ft. per building/max 60% coverage/max 2-story w/o Use Permit	General: 1.5 spaces per 1bd unit, 1.75 spaces per 2 bd unit, 2 spaces per 3 bd unit, plus 1 guest space for every 5 units over 30 units. RV spaces (10x25) = 5% of total spaces. Affordable Projects: RV requirement waived. Senior Projects: .5 spaces per unit.	F - 15' S - 5' R - 15'	Same as R-2	Same as R-1
R-4 - Multiple Family Residential District	6 - 10 DUA 10 - 20 DUA 20 - 30 DUA Mixed Use Core Neighborhood Commercial	7,000 sq. ft. per building/max 40' height	Same as R-3	1-story F - 15' S - 5' R - 10' 2-story F - 15' S - 10' R - 15'	Same as R-2	Minimum 15% of gross site area must be landscaped. Landscaped planters along street frontage required.
RM 6-24 - Various Multiple Family Districts	6 - 10 DUA 10 - 20 DUA 20 - 30 DUA	Minimum 15,000 sq. ft. lot/max 2-story w/o Use Permit	Same as R-3	1-story: F - 15' S - 5' R - 5' 2-story: F - 20' S - 10' R - 10'	Same as R-2	Minimum 20% of gross site area must be landscaped under RM-24, 40% under RM-6.

neighborhoods; maintaining Redding's basic quality of life including the availability of affordable and decent housing; and reversing the trend of deterioration in some of Redding's neighborhoods.

On- and Off-Site Improvements

Redding, like most cities in California, requires developers to provide a full complement of on- and off-site improvements including streets, curb, gutter, sidewalk, street trees, drainage, water, sewer, electric and communication utilities, and in some cases, traffic mitigations. The cost of these improvements is passed on to the eventual buyers or tenants in the form of higher purchase prices or increased rents.

Given the prevailing public sentiment to require new development to pay its own way rather than have the existing residents pay the cost through a broader base of financial support such as local taxes, it is unlikely that the cost burden of site improvements will markedly decrease in the near future.

The City has adopted off-street parking requirements for all residential developments (Municipal Code Chapter 18.62). These range from two covered spaces per single-family dwelling, to a formula based number of open spaces required for multiple-family projects based upon the total number of units and bedrooms in the individual project. It is felt that these requirements guard the public health and safety by discouraging burglaries, vandalism, and car theft. The initial higher cost is offset by long-term savings to the public and in police service costs. These requirements are also seen as a means of enhancing the community's appearance. Some modification of these requirements is allowed for certain types of development. For example, senior citizen projects can be developed at 50 percent of the off-street parking required for conventional apartments. Also, there is flexibility to reduce parking for mixed use development which can lower development costs for certain categories of development. Table 8 on the previous page illustrates the City's parking requirements for different types of development.

Miscellaneous

The City of Redding facilitates the development of affordable housing through the implementation of several sections of the Municipal Code. These sections, under specified conditions, provide for modification of the City's development standards and include the following:

Within the ***Zoning Ordinance*** (Municipal Code Section 18.19.095) developers of housing for seniors are allowed an automatic 100 percent increase in assigned density and granted development standard waivers, such as reduced parking requirements which add to the affordability of projects.

The City has adopted a ***Condominium Conversion Ordinance*** (Municipal Code Chapter 17.50) which encourages new condominium construction rather than conversions in order to assist in maintaining an adequate supply of rental housing. In addition, a 10 percent density bonus is available under certain conditions.

The City's ***Accessory Apartment Ordinance*** (Municipal Code Chapter 18.45) was adopted to allow the development of second units adjacent to existing single-family homes under certain conditions. The stated purpose was to add inexpensive rental units to the City's housing stock to meet the needs of smaller low- and moderate-income households; to provide homeowners of larger homes an opportunity to maintain their present home in a more affordable manner; to act as a transition between new higher density areas and established lower density areas; and to allow additional development in established single-family areas that are classified "multiple family" under the General Plan. It is anticipated that the current Municipal Code will be modified in the near future to make it more consistent with State Government Code Section 65852.2, regulating this type of development. Anticipated changes should make it more likely that additional second units will be built.

The City's ***Planned Development Ordinance*** (Municipal Code 18.36) allows density bonuses of up to 50 percent of the General Plan classification for residential projects built under the "planned development" model.

Finally, the City's ***Density Bonus Ordinance*** (Municipal Code 18.07) follows current State law which requires that density bonuses of at least 25 percent be available to developers of both single-family and multiple-family units if:

1. Twenty percent of the developed units are kept affordable for lower-income households (income less than 80 percent of the median); or

2. Ten percent of the developed units are kept affordable for very low-income households (less than 50 percent of the area median); or

3. Fifty percent of the total units are set aside for senior citizens (62 years or older; 55 years or older if a senior citizen development).

The Density Bonus Ordinance allows for the approval of additional development concessions if it is shown that the affordable project would be financially infeasible to develop without the concessions.

In an effort to make this particular mechanism a more effective and more widely used tool for affordable housing development, during 2000 Housing Division staff, in conjunction with the City Planning Division, will review and, where appropriate, revise the ***Density Bonus Ordinance***. It is anticipated that as part of the process, input will be sought from local residential developers and from other communities with successful programs.

FEES AND EXACTIONS

Various fees and assessments are charged by the City to cover the costs of processing permits and providing services and facilities, such as utilities, schools, and infrastructure. Nearly all these fees are assessed through a pro rata share system, based on the magnitude of the project's impact or on the extent of the benefit which will be derived. These fees, however, contribute to the cost of housing and may constrain the development of lower priced units. In order to mitigate this effect on affordable housing projects, other programs such as Density Bonuses, State and Federal funded construction programs, and tax free Mortgage Revenue Bond Financing, which all serve to greatly reduce overall production costs, are promoted by the City.

Table 9 presents typical development fees associated with the construction of a single-family house of four various sizes. Similarly, Table 10 summarizes the typical development fees associated with the construction of a fourplex. The fees include various building permits and plan check fees, development fees, water and sewer fees, traffic impact fees, and school impact fees. It is estimated that City development fees contribute approximately 7–10 percent to the overall cost of housing development.

Fees collected on zoning and subdivision applications presently do not cover staff costs for processing the application. Building fees represent the estimated cost of service for processing, plan check, inspection, etc. In addition to building and development fees, zoning, and subdivision application fees, subdividers are required to dedicate land to be developed into neighborhood parks or pay a per-unit fee in lieu thereof (or both) as a condition of approval of a final map or parcel map (Municipal Code 17.42). Current development impact fees fall short of the amount of money needed to pay for facilities which will be used by new development.

PROCESSING AND PERMIT PROCEDURES

Development within the City of Redding is subject to a review process overseen by the City's Development Services Department. Some form of discretionary approval (tentative subdivision map, use permit, variance, building permit, etc.) must be obtained prior to initiation of most construction activities. Currently, residential development proposals are typically approved at the requested density level, provided the request is consistent with the site's General Plan land use classification and zoning. Independent of the Draft General Plan policies, City Council has directed staff to revise sections of the Zoning Code to reduce the amount of development which requires a discretionary permit.

The review process in Redding is governed by four levels of decision-making authority: City Council, Planning Commission, Board of Administrative Review, and the Director of Development Services. In order to expedite the processing of routine and simple use permits and variances (zoning exceptions), the City, has utilized an administrative permit procedure for the past ten years. These permits may be processed and approved by the Director of Development Services instead of the Board of Administrative Review or Planning Commission, and do not require a public hearing.

A wide variety of discretionary permits are processed by the City's Planning Division. Most permits can be processed in from two weeks up to four months if an

environmental impact report (EIR) or other study is not required. This processing time is well within the time limits established by the Permit Streamlining Act (Public Resources Code Section 21100 et. seq.)

The City Building Division has established 10 working days as its goal for processing permits for new single family dwelling units and 15 working days for permits associated with new multiple-family projects. As of January 1999, approximately 75 percent of permit requests were processed within the allotted time. Due to the City's efforts to expedite the approval process, it is not felt that the amount of time necessary for processing applications and following existing permit procedures is a constraint to development.

TABLE 9

ESTIMATED FEES FOR TYPICAL SINGLE-FAMILY RESIDENCE

[3-bedroom, 2-bath house, 2-car (20'x24' garage)]

Living Space	1,200 sf	1,500 sf	1,800 sf	2,100 sf
Building Fees:				
Building	$ 636	$ 726	$ 804	$ 852
Electric	85	98	110	123
Plumbing	130	130	130	130
Mechanical	55	55	55	55
Plan Check	413	472	522	568
SMIP/microfilm	45	47	50	52
TOTAL	$1,364	$1,528	$1,671	$1,780
Development Fees:				
Park Fund	$ 406	$ 406	$ 406	$ 406
Electric Service	100	100	100	100
Capital Improvement	200	200	200	200
Storm Drain	168	198	228	258
Traffic Fees	942	942	942	942
TOTAL	$1,816	$1,846	$1,876	$1,906
Water & Sewer Fees:				
Sewer	$2,561	$2,561	$2,561	$2,561
Water Meter	55	55	55	55
Water Connect	2,071	2,071	2,071	2,071
TOTAL	$4,687	$4,687	$4,687	$4,687
School Fees:	$2,328	$2,895	$3,474	$4,053
TOTALS	**$10,195**	**$10,956**	**$11,708**	**$12,426**

The City of Redding has established benefit districts to fund public improvements that relate to specific geographic areas. These are in addition to the above fees. Such fees apply to storm drainage and street improvements.

Source: Development Services Department—Building Division—December 14, 1998

TABLE 10

ESTIMATED FEES FOR MULTIPLE-FAMILY PROJECT

(2-story, fourplex with 1,000 sq. ft. units with one 12'x22' garage per unit—600 sq. ft. on bottom, 400 sq. ft. on top, 2-bedroom, 2-bathroom, one 100-amp meter each unit, plus a 60-amp house meter.)

	Sq Ft		$ Rate/Sq Ft (from *II. Bldg Valuation Data*)		Valuation
Multiple Family	4,000	x	56.10	=	$224,400
Garages	1,056	x	21.50	=	22,704
		Total Value		=	$247,104

A. Permit Fees

1. Building permit cost from *I. Valuation Conversion Data* — $ 1,362
2. Plan check — 65 percent of building fee — 885
3. Electrical — .040 x 5,056 sq ft plus $17.70 app fee — 220
4. Mechanical —
   a. Application fee = $17.70
   b. 4 furnace heaters x $10.60 = $42.40
   c. 4 a/c units x $10.60 = $42.40
   d. 12 exhaust fans x $5.30 = $63.60 — 166
5. Plumbing —
   a. Application fee = $17.70
   b. 8 water closets + 8 bath lavies + 8 tub/showers + 4 kitchen sinks + 4 washing machines x $7.10 =$227
   c. 4 water heaters x $8.80 = $35.20
   d. Lawn sprinklers = $10.60
   e. Sewer pipe = $17.70
   f. 8 gas outlets = $7.10 — 315

SUBTOTAL — $ 2,948

B. Development Fees

1. Capital improvement — $200 plus $100 ea unit (4 units x $100 = 400) — 600
2. Storm drain — $.10 per square foot — 346
3. Park development — $217 per unit plus $27 ea bedroom — 976
4. Electric meters — $100 per meter (5 meters x $100) — 500

SUBTOTAL — $ 2,442

C. School Fees — $1.93 x 4,000 sq ft — $ 7,720

D. Sewer Fees — 2 HE units (4 units x .5 HE/unit) x $2,561 — $ 5,122

E. Water Fees — 1" meter without box — $ 100

F. Water Connection Fee — $ 5,177

SUBTOTAL — $ 10,399

G. Traffic Fees — 2,652

TOTAL — $ 26,161

NONGOVERNMENTAL CONSTRAINTS TO MAINTENANCE, IMPROVEMENT, AND DEVELOPMENT OF HOUSING

Nongovernmental or "market" constraints are those factors which limit the availability and affordability of housing, but over which the local government has little or no control. State law requires that the Housing Element contain a general analysis of these constraints as a basis for possible actions by the local government to offset the effect of these constraints. The three market factors which directly affect the availability and cost of housing in Redding are the price of land, the cost of construction, and the availability of financing.

PRICE OF LAND

Residential land prices within the City of Redding vary considerably depending upon several factors. The primary factors are: (1) the specific location of the property; (2) the availability of utility services to the property; (3) the topography of the property; and (4) if adequate paved access exists.

Over the past seven years (1992–98), prices of both single-family lots and multiple-family parcels within the City limits have seen a decrease in price. In 1991, the cost of a standard City lot in a moderately priced, residentially zoned neighborhood averaged $35,000–$55,000. Similarly located lots today average $25,000–$35,000. The price of land suitable for multiple-family development is typically broken down into a per-unit cost. This allows accurate comparison between parcels of different sizes and zoning designations. Within the City of Redding, the current average cost of land able to be developed with multiple-family units averages between $3,500–$6,500 per unit. In comparison, in 1991, the average land cost per unit was $7,000–$8,500.

COST OF DEVELOPMENT

The cost of development is comprised of four major components: land, fees, material and labor, and financing. Of these, material and labor costs make up the bulk of the development cost followed by land, fees, and financing costs. Table 11 illustrates the typical construction costs for a 1,500-square-foot, three-bedroom home in the City of Redding. These same development factors would affect development of multiple-family units as well.

Average construction costs in the City of Redding in 1999 range between $45 and $90 per square foot for single-family residential construction and $45 and $60 per square foot for multiple-family construction.

AVAILABILITY OF FINANCING

According to the Shasta County Board of Realtors, competitive financing is generally available for properties within the City of Redding, regardless of location, for both residential construction projects and home purchase. They report that there is no indication of discriminatory lending practices based on property location within the City limits. The interest rates for financing the cost of construction, as well as for long-term home financing, have widely fluctuated over the past 15 years. From 17–18 percent during the 1980s to the dramatically low rates (6 ½–7 ½ percent) of the past eighteen months, this single factor plays a major role in the affordability of housing. In the previous section on Housing Cost, the effect various interest rates have on the ability of low- and moderate-income households to purchase a home is explored.

Financing for remodeling or rehabilitation of existing structures is also reported by the Board of Realtors and local lenders to be readily available to qualified borrowers throughout the City. Commercial lenders offer home equity loans at a slightly higher interest rate (7–8 percent) than primary mortgages. These rates reflect the slightly greater risk involved in extending credit secured by a second (or greater) mortgage. In addition to credit history, standard factors taken into consideration for this type of loan are: (1) existing equity in the property and (2) ability of the loan recipient to repay the increased debt. Many older homes in need of repair are owned by lower-income families. These families in many instances have a difficult time meeting commercial lenders' debt-to-value criteria, as well as having difficulty meeting the income requirements necessary for repayment of the loan. In order to mitigate this constraint, the City offers a variety of rehabilitation loan programs to assist the lower-income homeowner with necessary repairs. The funding sources for these programs include local redevelopment funds, CDBG, and HOME funds.

TABLE 11

COST OF DEVELOPMENT, REDDING Single Family Detached (1,500 Square Feet)	
LAND = Includes Development Fees of $1,528	$25,000 to $35,000 (With Improvements)
CONSTRUCTION—$75/SF @ 1500 SF = Includes: Construction Fees of $9,428 Materials Labor Profit & Overhead	$112,500
CONSTRUCTION FINANCING = Interest on Construction Loan	$3,500
PRICE TO BUYER =	$141,000 to 151,000
Source: City of Redding, January 1999	

ENERGY CONSERVATION OPPORTUNITIES

The need to conserve and efficiently utilize energy supplies, as well as to develop alternative energy sources, has been recognized by both government and industry experts. Short- and long-range solutions to energy problems involve changes in energy-consumption patterns and require willingness on the part of Americans not only to use less energy but to make qualitative changes or adjustments in their lifestyles. Examples include changes in consumer preferences such as the use of smaller and more energy-efficient cars, increased use of public transportation, and shifts to modified or new types of housing that are more energy efficient.

The City of Redding Electric Department is the major provider of electrical power within the City limits. Occasionally, newly annexed areas will continue to receive electrical service from a previous provider until such time as the customers are transferred over to the City electrical service. The City of Redding Electric Department reported that in 1998, the City's electric peak load was 208 megawatts, an increase of 26 percent from the electric usage reported in 1988.

Any forecasts of the City's future need for electricity consider the effectiveness of conservation and load-management programs. The City has embarked on a vigorous campaign to develop future cost-effective programs and projects. The City employs a full-time energy conservation specialist to promote community energy awareness and conservation. Current conservation efforts and programs are listed below:

- Residential energy audits and general conservation information and materials.
- Air Conditioning Load Management Program to reduce peak electrical capacity during the summer months.
- Swimming Pool Load Management Program to encourage the use of swimming pool equipment during off-peak hours.
- Load Curtailment Program promotes the voluntary reduction of electrical usage by large-use customers and by the general public.
- Street Light Conversion Program is replacing less efficient mercury vapor street lamps with more efficient high-pressure sodium lights.
- Enforcement of mandatory energy-efficient building and appliance standards for both commercial and residential construction continue to reduce the energy consumption of space heating, air conditioning, water heating, etc.
- Residential rehabilitation programs for private and rental housing require inclusion of energy conservation retrofits and/or repairs when at all feasible. Typical upgrades include insulation; weatherstripping; installation of dual-pane windows; and provision of newer, more energy-efficient heating and cooling systems.

In addition to the City of Redding, Pacific Gas and Electric Company (PG&E) provides electric service to approximately 35 customers located within areas that have been annexed to the City. PG&E is also the sole provider of natural gas within the City limits. PG&E provides a variety of programs for its customers that promote conservation of energy resources, including home energy audit services, weatherization services, and insulation rebates.

GOALS AND POLICIES

Housing element law requires that a community set forth in the housing element a statement of its goals and policies relative to the maintenance, improvement, and development of housing. This section identifies seven primary goals and related policies. These goals and policies will serve to guide the actions of the City of Redding over the next planning period in regard to its identified housing needs.

GOAL H1

PRESERVE AND IMPROVE THE EXISTING HOUSING STOCK

Policies to achieve this goal are to:

H1A. Encourage the private rehabilitation of housing.

H1B. Develop and maintain effective housing rehabilitation programs funded through Federal, State, and local funding sources.

H1C. Support effective code enforcement activities in existing residential neighborhoods.

GOAL H2

FACILITATE THE CREATION OF NEW AFFORDABLE HOUSING OPPORTUNITIES

Policies to achieve this goal are to:

H2A. Develop and maintain efficient and effective Rental Assistance Programs.

H2B. Develop and maintain funding sources for new affordable housing development.

H2C. In accordance with State law, provide density bonuses and other incentives as cost-saving development concessions to encourage the private development of affordable housing.

H2D. Develop working partnerships with other community providers of housing services in order to increase affordable housing opportunities.

H2E. Develop and maintain funding programs that are responsive to identified community housing needs.

H2F. Ensure that adequate residentially classified lands at all density levels are identified on the General Plan Diagram to meet existing and projected housing needs.

GOAL H3

SUPPORT CREATIVE REUSE OF EXISTING FACILITIES AND LAND

Policies to achieve this goal are to:

H3A. Support opportunities and partnerships that leverage outside resources along with public funds to accomplish reuse/redevelopment.

H3B. Develop, maintain, and periodically update an inventory of existing structures, as well as vacant or under-utilized land which would be appropriate for specialized residential uses (i.e., shelters, group homes, etc.).

H3C. Use redevelopment powers or other appropriate mechanisms to acquire and/or assemble sites for residential purposes.

GOAL H4

ENHANCE THE QUALITY OF LIFE WITHIN RESIDENTIAL NEIGHBORHOODS

Policies to achieve this goal are to:

H4A. Promote and encourage homeownership for all income levels and utilize available Federal, State, and local resources to achieve this end.

H4B. Support neighborhood-based efforts such as community-oriented policing, neighborhood clean-up drives, and watch programs.

H4C. Develop and maintain programs that support the development of culturally diverse, integrated, safe, healthy, and attractive neighborhoods.

H4D. Develop neighborhood strategic plans for target neighborhoods.

H4E. Implement comprehensive redevelopment programs for each target neighborhood using the strategic plans as framework.

GOAL H5

ACT AS A CATALYST FOR INCREASED PRIVATE INVESTMENT IN THE COMMUNITY

Policies to achieve this goal are to:

H5A. Identify opportunities for new private investment in targeted neighborhoods.

H5B. Encourage and promote the development of projects that leverage housing funds into needed public improvements and infrastructure. Where feasible, these efforts should help facilitate mixed-use and economic development objectives of the General Plan.

H5C. Develop incentive package for landlords participating in the Section 8 program to encourage unit upgrade and ongoing high-quality maintenance of Section 8 rental units.

GOAL H6

IDENTIFY AND ADDRESS THE HOUSING NEEDS OF SPECIAL POPULATION GROUPS WITHIN THE COMMUNITY

Policies to achieve this goal are to:

H6A. Develop and maintain programs that ensure a wide range of housing choices to all in the community.

H6B. Develop and maintain effective linkages with community service providers to special populations.

GOAL H7

PROMOTE ACHIEVEMENT OF ECONOMIC SELF-SUFFICIENCY FOR ALL PROGRAM PARTICIPANTS

Policies to achieve this goal are to:

H7A. Support program efforts that assist in the elimination of barriers to economic self-sufficiency.

H7B. Support program efforts that are "hand-up" rather than "hand-out" oriented.

1999–2003 ACTION PROGRAM

REVIEW OF HOUSING ACTIVITIES 1992–1998

This section presents a summary of activities and accomplishments that have occurred under the various programs set forth in the previous Housing Element and undertaken by the City during the past seven-year period, 1992–1998. Housing program efforts which resulted in housing units being constructed, conserved, or rehabilitated both through private endeavors and through public-program assistance are included. A cumulative estimate of units developed, conserved, or rehabilitated, both publicly and privately, is presented in Table 12 below.

local redevelopment funding in addition to Federal sources of development financing. All have affordability requirements in excess of 40 years. Of the units, 61 are targeted towards the elderly or disabled populations, 16 will be occupied by households with developmental disabilities, and 20 by mentally disabled households. In late 1998, the Redevelopment Agency approved funding for a proposed 64-unit complex that will provide a mix of affordable rental housing for small and large, low-income families and the frail elderly. It is anticipated that this complex will utilize a combination of low-income tax credits and private funding in addition to the redevelopment financing. Development of the complex will take place during the planning period.

Direct financial assistance was also provided in the form of secondary mortgage financing through the Downpayment Assistance Program to 54 households, enabling them to purchase new single-family homes.

TABLE 12

ACCOMPLISHMENTS (1992–1998)							
Type	Number of Units		Total	Affordable to:			
	With Program Assistance	W/O Program Assistance		Very Low	Low	Mod	Above
Housing New Construction:	151	3,839	3,990	102	63	1,900	1,925
Housing Rehabilitation:	468	est. 1,632	2,100	313	117	956	714
Housing Conservation:	793	Unknown	793	308	233	252	0

New Construction Activities

Over the past seven years, approximately 3,990 new housing units were added to the City's housing stock; 77.6 percent in the form of single-family units, 21.6 percent as new multiple-family units, and less than 1 percent in the form of new mobile home units. (Note: Mobile home units are only counted in the Building Division statistics if placed upon a permanent foundation. Those added to mobile home parks are not counted.)

Direct financial assistance was provided to three affordable rental housing projects, resulting in the development of 97 new multiple-family units affordable to very low-income households. These projects utilized

Of these households, 37 (68.5 percent) had household incomes under 80 percent of the area median. All of the newly constructed homes had purchase prices at or below $95,000.

Rehabilitation Activities

It is estimated that approximately 2,100 housing units have been rehabilitated in the community over the past seven years. Of these, 486 units were repaired through the assistance of City-administered rehabilitation programs and approximately 1,614 units privately.

The City has operated a successful housing rehabilitation program for over twenty-four years. The cornerstone of the City's efforts has been the Homeowner Rehabilitation Program, primarily funded

through the City's Community Development Block Grant Program, with supplemental funding through a variety of local, State, and Federal sources. This program was successful in rehabilitating 286 owner-occupied units over the past seven years. Of these, 87 percent were occupied by lower-income households.

Since 1992, the City has been successful in applying for and receiving approximately $7 million in HOME Grant funds. Approximately $2.2 million of these funds have been used to rehabilitate 114 rental units which are now rented at a rate which is affordable to lower-income households. Another 68 rental units were rehabilitated utilizing CDBG, or Federal Rental Rehabilitation grant funding. All of these units will also be rented at affordable rents by lower-income households.

Conservation Activities

Over the past seven years, the Redding Housing Authority has been successful in applying for and receiving 202 additional rental assistance subsidies for the very low-income households in the community. Many of these subsidies have been targeted to special populations such as the frail elderly, the disabled, families in crisis, and others identified with special needs. The Housing Authority's Family Self Sufficiency Program has been identified by HUD as a exemplary program and currently has 94 households striving to achieve personal goals leading towards ultimate freedom from public assistance. In the upcoming planning period, it is anticipated that this model will be duplicated as feasible in other program efforts.

Utilizing the Downpayment Assistance Program (DAP) and the Mortgage Credit Certificate Program (MCC), established in 1988 and 1989, respectively, a total of 400 low- and moderate-income households were able to purchase their own homes, 278 since 1992. Since 1988, $1.9 million in HOME funds and $4.2 million in redevelopment funding have been used for this purpose.

At the present time, approximately 36 households are assisted each year with DAP loans which average $15,466. In June 1998, a pilot home purchase program was established targeting disabled households participating through the FannieMae HomeChoice Program. The pilot program allows for a lower downpayment and additional grant funds to be utilized in the purchase. It is anticipated that this program will assist a minimum of 20 disabled households purchase a home over the planning period.

The City was successful in each of its six applications to the State for Mortgage Credit Certificates. Over 300 households received MCCs through the City's efforts, 235 since 1992. In 1998, based upon changes in the debt-allocation process, only a very small amount of MCC allocation was available for use. Due to this situation, the City chose not to apply for additional MCCs.

The statewide Rural Gold Program available to low-income, first-time homebuyers was widely used by North State lenders. The Rural Gold Program is administered by local participating lenders and provides low-income homebuyers with funds that can be used in conjunction with the household's savings for the required downpayment.

Homeownership efforts will be an essential part of the City's targeted neighborhood activity in the upcoming planning period. Increasing levels of homeownership in some of Redding's oldest residential neighborhoods will help to reverse the trend of neglect and deterioration.

In 1995, Redevelopment Agency Setaside Funds were utilized to assist a local nonprofit housing provider in the purchase of a 78-unit, senior residential hotel. Financial assistance was needed to cover the start-up costs during the initial lease-up period of the facility. Today, the facility is fully occupied by lower-income seniors at affordable rents.

A second older residential hotel that provides 94 units of single-room occupancy housing to the lower-income community is being considered for assistance at the present time. The hotel is located in Redding's Downtown and has historical significance to the area. Several options are being explored that would preserve the housing component of the facility and provide enhanced affordability to the units.

Conservation activities in the upcoming planning period will continue to include activities to preserve the community's affordable housing units which are at risk of converting to market-rate usage during the planning period.

APPROPRIATENESS OF GOALS, POLICIES, & OBJECTIVES

The Housing Element contains housing goals, policies, and objectives which were developed in 1998 during a series of housing workshops held by the City Council sitting as the Redding Redevelopment Agency. These directives, which reflect an acute awareness of the essential nature of decent, affordable housing will set the direction and focus of the City's housing efforts over the planning period, 1999–2003. The goals and objectives are consistent with the stated goals and objectives of other elements of the revised General Plan with emphasis on the importance of (1) preservation and revitalization of existing neighborhoods; (2) maximization of funding and other resources through the establishment of effective and mutually beneficial partnerships with other public and private entities; (3) increasing affordable housing opportunities for all portions of the community; and (4) preserving and protecting the community's natural resources.

During this period, the City intends to pursue its housing goals through a multifaceted strategy which includes both moderate and substantial rehabilitation of the existing housing stock, provision of direct rental subsidies for those groups with the most need, conservation of the community's existing affordable housing stock, and construction of affordable housing units.

IMPLEMENTATION PROGRAMS AND QUANTIFIED OBJECTIVES 1999–2003

The following section sets forth the schedule of actions the City of Redding is undertaking or intends to undertake within the current planning period in order to implement the previously listed policies and achieve the community's stated housing goals. Included within most action/program descriptions is a quantified objective which states the progress towards the goal the City expects to accomplish during the planning period, actual accomplishments to date and over the past seven years, and any proposed changes to be implemented during the current planning period.

Table 13 is a summary of the number of units expected to be constructed, rehabilitated, or conserved both privately and through implementation of the activities described in this section over the planning period:

TABLE 13

SUMMARY OF PROJECTED HOUSING ACTIVITIES 1999–2003

Type	# Units With Program Assistance	# Units Private Development	Total	Affordable to:			
				Very Low	Low	Mod	Above
Housing New Construction:	220	1,780	2,000	100	140	880	880
Housing Rehabilitation:	356	est. 1,250	1,606	144	212	1,000	250
Housing Conservation:	576	Unknown	576	344	232	0	0

In order to achieve the stated quantified objectives, the City will utilize funding from a variety of sources. The current funding sources utilized by the City on a regular basis for its housing activities include Federal Community Development Block Grant (CDBG) funds, Federal HOME funds, Federal Section 8 funds, and local redevelopment Low- and Moderate-Income Housing Setaside funds. The combined total available from these sources is approximately $8,500,000 annually. A brief description of these sources follows.

- *Federal CDBG Funds* — The Community Development Block Grant program was created by Congress in 1974 to permit local government to devise flexible and constructive approaches to prevent and/or correct physical, economic, and social deterioration. The program is directed toward neighborhood revitalization, creation of housing opportunities, economic development, and the provision of improved community facilities and services. Activities funded through this source must meet one of the following three national objectives: (1) primarily benefit lower-income persons, (2) eliminate slums or blight, or (3) meet other urgent local community development needs. The City is considered an "entitlement" community by HUD for this program. This means that CDBG funding is received by the City on a formula basis and does not require a competitive application. Approximately $920,000 annually is available from this source.

- *Federal HOME Funds* — The HOME program was included as part of the Cranston-Gonzalez National Affordable Housing Act of 1990. The legislation authorized funding to states and local governments to provide incentives to develop and support affordable rental housing and homeownership opportunities. Eligible activities include: real property acquisition, rehabilitation, and construction of affordable housing. Distribution of HOME funds is by formula based upon a variety of measures, including local housing market factors, local housing stock conditions, cost of producing housing in the local market, and extent of poverty in the community. While the City is considered an "entitlement" community under this program as under CDBG, since 1992, the City has chosen to compete on a statewide basis for a larger portion of funds. The City has been successful on each of its application and has received approximately $1,000,000 annually from this source. The Redevelopment Setaside Fund has provided the required 25 percent local match since the inception of the program.

- *Federal Section 8 Funds* — These funds make up the largest portion of funds available to the City for housing purposes. The funds are restricted for the administration of the Section 8 Program and direct rental assistance payments on the 1,304 Section 8 rental subsidies administered through the Redding Housing Authority. Approximately $5.5 million is available annually through this program. Administrative funds total approximately 12 percent of the funds available. To the extent that administrative costs do not total the full 12 percent, the excess funds are able to be utilized on other types of housing activities. Over the past five years, the costs to administer the Section 8 Program has exceeded the amount available through HUD. It is not anticipated that excess administrative funding will be available over the planning period.

- *Redevelopment Setaside Funds* — State law requires redevelopment agencies to provide a minimum of 20 percent of their tax-increment income to increase, improve, and preserve affordable housing opportunities for low- to moderate-income persons. Approximately $1,000,000 in funding for housing is generated annually as part of the Redevelopment Agency's tax-increment income. The Redding Redevelopment Agency oversees the allocation of these monies.

It is anticipated that the Setaside Fund will be utilized to fund a variety of housing activities over the planning period. These will include, but are not limited to, acquisition, rehabilitation, demolition, construction, conservation, and development of housing units. The anticipated activities and expenditure levels are detailed within the Agency's adopted Implementation Plans for the planning period 2000-2004 and are summarized as follows:

Homeownership Assistance- est. $2.2 million (includes program income)
Affordable Housing Development- est. $2 million
Neighborhood Revitalization- est. $3.4 million (includes all activities within targeted neighborhoods)
Other Activities- est. $1.25 million

In order to increase the amount of funds available over the planning period, the feasibility of issuing tax-exempt bonds secured by all or a portion of the Setaside Fund will be considered.

GOAL H1: PRESERVE AND IMPROVE THE EXISTING HOUSING STOCK

(See also Activities 4.2, 5.1)

1.1 ACTIVITY: Moderate/Substantial Rehabilitation—Owner-Occupied Units

Description: Rehabilitation loans are available to owner-occupants citywide who are at moderate-income level or below. These loans are made directly to the homeowner at an interest rate of 3–5 percent and may be amortized or deferred depending upon the owner's circumstances. Eligible activities include basic code-related repairs; weatherization improvements; site improvements such as curbs, gutters, and sidewalks; as well as some general property improvements. The CDBG-funded rehabilitation activity was established in 1975, with redevelopment setaside funding added in 1987 and HOME funds in 1992. Other Federal, State, and local funding is utilized as it is made available. Approximately 890 homes have been rehabilitated to date through this activity, 188 since 1992.

Funding/Administration: Current funding for the activity comes from CDBG (1998—$138,810); HOME (1998—$113,000), as well as the Rehabilitation Revolving Loan Fund (1998—$430,700). The latter fund consists of amortized payments and lump sum payoffs on existing CDBG rehabilitation loans. Except for rehabilitation efforts to take place within identified targeted neighborhoods, it is not anticipated that other sources of funding for this effort will be available during the planning period. Local administration is through the City's Housing Division.

Proposed Changes: The Division anticipates developing additional incentives for those projects that are either located within an identified targeted neighborhood or are complying with the City's code enforcement efforts. These incentives might include more favorable financing terms and possible infrastructure grants.

Objective: To rehabilitate 44 single-family homes per year. Of these, approximately 6 (14 percent) are anticipated to be very low-income homeowners and 38 (86 percent) are anticipated to be low-income homeowners.

1.2 ACTIVITY: Moderate/Substantial Rehabilitation—Rentals Units

Description: Rehabilitation of the community's existing rental stock is accomplished through several different initiatives. Owner-investors may access low-interest financing for upgrading rental units occupied by lower-income tenants. Long-term affordability covenants are recorded on the assisted properties to ensure affordability into the future. Approximately 114 units throughout the City have been rehabilitated under the current HOME-funded program. Since implementation of the program in 1993, over $1.5 million in loans have been committed along with over $495,700 in private funding. Funding is also available to assist in the acquisition of rental units, with or without subsequent rehabilitation, in return for long-term affordability. Redevelopment Setaside funds can be combined with HOME funds for this purpose. Nonprofit organizations providing permanent or transitional living opportunities may also utilize the existing funding.

Funding/Administration: Local administration of the activity is through the City's Housing Division. As described above, both HOME and redevelopment funding is available.

Proposed Changes: The existing structure of the current rehabilitation programs will be reviewed in 1999. It is anticipated that additional incentives will be developed for those projects located within the identified targeted neighborhoods, projects that provide longer affordability covenants, projects that contain units to be occupied by identified special population groups, or projects that provide other types of increased public benefit.

Objective: To rehabilitate 30 rental units per year. Of these, approximately 16 (53 percent) are

anticipated to be occupied by very low-income households and 14 (47 percent) by low-income households.

1.3 ACTIVITY: Minor Rehabilitation—All Units

Description: In 1996, the City's two small rehabilitation grant programs were consolidated into the Emergency Repair Program. The current program provides an unsecured loan at 3 percent interest, up to a maximum of $2,500, to very low-income households on a one-time basis. Eligible repairs must be connected to basic health and safety issues. The program can be utilized for needed repairs to owner-occupied, conventional dwelling units; mobile homes; or rental units. Approximately 177 units have been repaired under these efforts, 98 of these since 1992.

Funding/Administration: Current funding for this effort is through the CDBG program (1998—$20,000). The activity is administered by the City's Housing Division.

Proposed Changes: During 1999, it is the City's intent to modify the renter accessibility improvements component of the activity to make it more effective. It is anticipated that the required match of private dollars by the landlord will be eliminated in exchange for occupancy controls in effect for five years following assistance. The Division will also explore the feasibility of developing a "handyman" minor repair program for low-income seniors.

Objective: To rehabilitate a minimum of 15 units per year. It is anticipated that 90 percent of these will be very low-income households.

1.4 ACTIVITY: Code Enforcement

Description: The Redding Municipal Code provides for City abatement of hazardous properties/structures through a multiphased hearing process. For residential properties, the goal is to restore units to a liveable condition if at all possible. Upon initiation of the abatement process, owners are instructed to cure subject properties/structures of the hazardous conditions. Ultimate action by the City upon noncompliance of the owner is to remove the offending structure or condition from the property. The great majority of code enforcement cases are able to be resolved prior to demolition of the structure by the City.

Funding/Administration: The code enforcement activity is administered by the Code Enforcement Section of the City's Building Division and by the City Attorney. Funding for the effort has been provided to date through the City's General Fund and the CDBG program.

Proposed Changes: As part of the City's neighborhood revitalization efforts, incentives to encourage compliance with code enforcement issues will be included within existing housing programs.

1.5 ACTIVITY: Conservation of the Redding Hotel

Description: The Redding Hotel, a 94-unit residential hotel located in Downtown Redding, is the focus of a revitalization effort by the City of Redding. The historical hotel is an important source of affordable housing for low-income seniors and disabled persons in the City and provides seven commercial spaces for small businesses in the heart of the Downtown business district. The City and the Redding Housing Authority are in the process of discussing possible options for revitalization of the facility with the current owner.

Funding/Administration: The City's Housing, Building, and Redevelopment Divisions are participating in the discussions regarding revitalization of this facility. Until a preferred solution is arrived at, the specific funding needed to carry it out has not been identified.

Proposed Changes: New Activity.

Objective: To conserve 94 units of affordable SRO housing.

Time Frame: FY 99–02

1.6 ACTIVITY: **Conservation of At-Risk Units**

Description: During the planning period, 58 housing units in the community are at risk to convert to non-low-income use. These units represent an important component of the current affordable housing inventory in the City. In order to limit the loss of these units to the community, a number of actions will be considered. The COMMUNITY PROFILE, *Affordable Housing Units Eligible to Convert to Open Market During 1992-2002,* section describes these actions as they apply to each at-risk project.

Funding/Administration: The activity will be undertaken by the City's Housing Division. See discussion in the COMMUNITY PROFILE, *Affordable Housing Units Eligible to Convert to Open Market During 1992-2002,* section regarding possible funding sources for activity.

Proposed Changes: None.

Objective: To conserve 58 affordable rental units.

GOAL H2: FACILITATE THE CREATION OF NEW AFFORDABLE HOUSING OPPORTUNITIES

(See also Activity 4.1)

2.1 ACTIVITY: **Revision of the Density Bonus Ordinance**

Description: The current Ordinance allows for density bonuses of 25 percent over the maximum land density specified in the General Plan plus additional concessions if needed to enhance affordability of the project OR provision by the City of other incentives of equivalent financial value. Eligible projects are those consisting of 5 or more units where the developer is either: (1) reserving 20 percent of total units constructed for lower-income households or (2) reserving 10 percent of total units constructed for very low-income households or (3) reserving 50 percent of total units constructed for seniors.

Funding/Administration: The City of Redding contributes planning staff time for permit processing. Monitoring the compliance of developers to the requirements of the density bonus is the responsibility of the Housing Division.

Proposed Changes: During 1999, the City's Housing and Planning Divisions will undertake a review of the existing Ordinance and will recommend revisions as appropriate. It is anticipated that changes will be made that will provide additional development concessions for affordable housing developments.

Objective: To facilitate the construction of a minimum of 20 affordable housing units per year.

2.2 ACTIVITY: **Development of New Affordable Rental Units**

Description: In December 1998, the Redding Redevelopment Agency approved a set of standards, qualifications, and criteria to be used when it considers requests for mortgage or construction loans to finance new affordable multiple-family development. It is anticipated that the Redevelopment Agency's Setaside Fund through the Affordable Housing Development Program will be the primary source of local financial assistance to affordable rental housing development projects in the community over the planning period. It is the Agency's goal to help facilitate the development of this type of housing through the provision of "gap" or "bridge" financing. Additional sources of financing such as Federal, State, and private funding will be leveraged in most cases. The types of assistance able to be provided under this program include predevelopment loans, land purchase loans, construction loans, and permanent long-term loans.

Several State and Federal programs are currently available, specifically designed to assist affordable rental construction projects. The City will continue to endorse the development of new multiple-family dwellings under programs such as HUD's 202 and 811 programs in order to expand

the availability of affordable rental housing in the community. Federal tax credits for eligible low-income rental housing projects are currently available by application to the State Mortgage Bond Allocation Committee. Strong consideration is given to projects which target special groups such as large families, homeless, or the at-risk population.

Private lenders have also developed several new types of financing that can be accessed for affordable housing projects. Many bankers have joined together in lender consortiums specifically to fund projects that would not be able to access standard sources of funds due to affordability requirements, higher levels of risk, lower cash flow, etc.

Three multiple-family projects with a total of 97 units have been constructed over the past five years, utilizing a mix of the above public and private sources of financing. All of these units are set aside for occupancy by very low-income households at affordable rates for a minimum of 40 years. Affordability of units will continue to be the focus of all these programs in the future.

Funding/Administration: The Redevelopment Setaside Fund will be the primary source of local financing for new development efforts. In addition, HOME or CDBG funds might also be appropriate on specific projects. The administration of these efforts will be through the City's Redevelopment and Housing Divisions.

Proposed Changes: None.

Objective: To facilitate the development of 50 new units of multiple-family housing affordable to lower- and moderate-income households annually.

2.3 ACTIVITY: Partnerships with Local Nonprofit Housing Development Entities

Description: Over the past seven years, several local organizations have been established or have expanded their scope of services to include development of affordable housing opportunities in Redding. These entities include Northern Valley Catholic Social Services; Shasta Housing Development Corporation; Resources for Rural Community Development, Inc.; and Habitat for Humanity. During the upcoming planning period, it is anticipated that these organizations will undertake a variety of activities to increase the availability of affordable housing in the community. These efforts include acquisition of existing housing units, development of new housing units, and the provision of homeownership opportunities. Partnerships with appropriate organizations will allow limited resources—both staff and money—to be maximized.

Funding/Administration: These groups will pursue development and administrative funding from all appropriate local, State, Federal, and private sources. Each entity will administer its individual projects.

Proposed Changes: None.

Objective: To provide, collectively, an additional 50 units of affordable housing annually.

2.4 ACTIVITY: HUD Section 8 Rental Assistance Program

Description: Provides direct rental assistance to very low-income individuals and families. Assistance is offered to eligible applicants based on their date and time of application. City of Redding residents are offered assistance before all other residents. In addition, preference is provided for veterans and local households displaced through government actions.

Funding/Administration: Funding is received directly from HUD for eligible participants. Local administration of the program is through the Redding Housing Authority. The 1998–99 budget for the Housing Authority is $6.6 million. A total of 1,304 rental subsidies are currently administered by this office and another 413 project-based rental subsidies are administered directly by HUD. The Housing Authority has experienced continuous growth over the past 14 years. Since 1985, the Housing Authority has been successful in bringing 705 additional subsidies to the community.

Proposed Changes: Constant monitoring of the ongoing activity will continue to assure that eligible households are served in as timely and equitable manner as possible. Periodic adjustments in procedures, etc., will be made as necessary. In 1999, serious consideration will be given to organizing caseworkers on a geographic basis. Under this model, staff will become more familiar with the available rental units in their particular territory and should be able to serve both participants and landlords more efficiently.

Objective: To serve an additional 35 households each year.

GOAL H3: SUPPORT CREATIVE REUSE OF EXISTING FACILITIES AND LAND

(See also Activities 1.5, 2.3, 4.2, 5.2)

3.1 ACTIVITY: Develop Inventory of Vacant Land and Sites Suitable for Reuse.

Description: It is anticipated that as part of the City's neighborhood revitalization efforts, vacant or under utilized land will be identified and, within the scope of the neighborhood master plan, alternative uses may be proposed. The master plans will be developed utilizing extensive community involvement to identify neighborhood deficiencies and potential opportunities for revitalization. It is anticipated that the City will assist in the promotion of the identified investment opportunities to the development community in order to facilitate the revitalization effort.

Funding/Administration: It is anticipated that development of the targeted neighborhood master plans will be overseen by the Housing Division, Redevelopment Division, and/or the Planning Division.

Objective: To stimulate additional private investment in targeted neighborhoods through the identification of vacant land and sites suitable for reuse.

Time Frame: 99–01

GOAL H4: ENHANCE THE QUALITY OF LIFE WITHIN RESIDENTIAL NEIGHBORHOODS

(See also Activities 1.1, 1.2, 1.3, 1.4, 5.1, 5.2)

4.1 ACTIVITY: Increase Homeownership Opportunities

Description: Since July 1988, with the implementation of the Downpayment Assistance Program (DAP), the City has recognized the need for homeownership assistance for eligible first-time homebuyers. The existing program offers assistance with the downpayment required when purchasing a home. Eligible participants must be first-time homebuyers, buying a home in the City of Redding, and be moderate-income or less. Assistance is in the form of an equity-sharing mortgage recorded as a second lien on the newly purchased property. Since 1988, approximately 400 families have been able to purchase their first home utilizing this program. Since 1988, approximately $6.1 million in loans have been expended. All payoffs on existing DAP loans go into a revolving loan fund in order to be utilized for further DAP loans.

Today, lower interest rates and relatively low housing prices have lessened the need to provide public assistance to all but lower-income households. It is anticipated that DAP assistance will continue to be available for these households throughout the planning period. For the future, homeownership has been identified as an important tool to be utilized in the stabilization of older, declining neighborhoods. It is anticipated that the current efforts will be intensified in selected target neighborhoods in order to increase the number of owner-occupants residing in these neighborhoods. Additionally, increasing homeownership among special population groups, historically renters, will be pursued over the planning period. In 1998, a pilot homeownership loan program was approved by the Redding Redevelopment Agency. The program, modeled after the highly successful DAP effort, is designed to assist very low-income disabled households achieve homeownership.

The pilot program partners with the FannieMae HomeChoice Program to provide primary and secondary financing. The homebuyer is provided with both pre-and post-purchase counseling to help with the process.

Funding/Administration: Current funding for the DAP activity is through the Redevelopment Housing Setaside Fund and HOME. The program is locally administered by the Redevelopment Agency staff.

Proposed Changes: It is anticipated that over the planning period, greater emphasis will be given to providing assistance to lower-income households. The current equity-sharing format is also to be evaluated and, if appropriate, changes will be proposed. Neighborhood revitalization efforts will likely emphasize increasing homeownership opportunities within the targeted neighborhoods.

Objective: To assist 45 low- to moderate-income, first-time homebuyers purchase homes per year.

4.2 ACTIVITY: **Target Neighborhood Master Planning**

Description: In support of the stated General Plan goal of preserving and improving existing residential neighborhoods, the development of three neighborhood revitalization strategies, or "master plans," will be undertaken over the next 24 months. The proposed plans will target three of Redding's older neighborhoods: the Parkview Neighborhood; the Martin Luther King, Jr., Neighborhood; and the residential portions of Redding's Downtown. The latter area will be included as part of a Strategic Plan being developed for the Downtown business core. It is anticipated that the development of the plans will involve a high level of community involvement both in the identification of neighborhood deficiencies and in the development of potential solutions. The Parkview Neighborhood has been selected for the initial effort, followed by the MLK Neighborhood.

Funding/Administration: The development of the targeted neighborhood plans will be overseen by staff in the Housing Division and Redevelopment Division. The development of the Downtown Strategic Plan shall be overseen by the Redevelopment Division in conjunction with the City's Planning Division.

Proposed Changes: New Activity

Objective: To develop a Parkview Neighborhood Master Plan by December 1999, an MLK Master Plan by March 2001, and a Downtown Specific Plan by February 2000.

Time Frame: 99–01

GOAL H5: ACT AS A CATALYST FOR INCREASED PRIVATE INVESTMENT IN THE COMMUNITY

(See also Activities 1.6, 2.1, 4.2)

5.1 ACTIVITY: **Develop Incentive Program for Section 8 Landlords**

Description: During 1999, the Housing Authority will develop an incentive program that encourages owners of rental units occupied by Section 8 tenants to maintain units at a standard in excess of the minimum required through HUD. Emphasis will be on improving exterior appearance including parking, landscape, common areas, and building exteriors so that the facility is a positive influence on the neighborhood. It is anticipated that properties located within the targeted neighborhoods will be the initial focus of the program.

Funding/Administration: The activity will be administered by the City's Housing Division. Existing rehabilitation funding will be utilized, including CDBG, HOME, and redevelopment sources.

Proposed Changes: New Activity.

Objective: To support neighborhood revitalization efforts through the participation of 6–10 Section 8 landlords annually.

5.2 ACTIVITY: **Acquisition and Assembly of Key Parcels Within Target Neighborhoods**

Description: The Redevelopment Agency anticipates the acquisition of property within the targeted neighborhoods for the purpose of facilitating the redevelopment of such property in accordance with a neighborhood strategic plan. Following such acquisition, development partnerships will be solicited to carry out the redevelopment envisioned by the plan.

Funding/Administration: This activity will be administered by the Redevelopment Division. It is anticipated that redevelopment funding will be utilized for the property acquisition, relocation of tenants if necessary, and any costs related to preparing the property for redevelopment.

Proposed Changes: New Activity

Objective: Within 24 months, acquire, assemble, and develop key parcels in the Parkview Neighborhood needed to implement the Neighborhood Master Plan. Acquire, assemble, and develop key parcels in other targeted neighborhoods consistent with adopted neighborhood plans.

GOAL H6: IDENTIFY AND ADDRESS THE HOUSING NEEDS OF SPECIAL POPULATION GROUPS WITHIN THE COMMUNITY

(See also Activities 2.3, 4.1)

6.1 ACTIVITY: **Fair Housing Referral and Information Program**

Description: The program provides basic information about fair housing rights to both landlords and tenants. Referrals are made for discrimination in housing complaints to the State Department of Fair Employment and Housing. Special outreach efforts are made to include groups likely to experience discrimination in housing, including minorities, the elderly, the handicapped, and lower-income families. These efforts include providing staff speakers at service-agency meetings and periodic informational mail-outs to service organizations. In addition, all tenants and landlords participating on the HUD Section 8 Program are counseled as to fair housing rights and responsibilities. For the 12-month period ending December 31, 1998, the program assisted approximately 354 households with fair housing information.

Funding/Administration: Funding for this program is through the City's Community Development Block Grant Program. Local administration is by the City's Housing Division.

Proposed Changes: During 1999, the City will contract with local providers of legal services to provide a one-day workshop on Fair Housing issues.

Objective: To educate the public regarding fair housing law, including antidiscrimination regulations.

6.2 ACTIVITY: **Homeless Assistance**

Description: Several nonlocal funding sources are currently available to developers of projects designed to shelter homeless persons or families, including those with special needs such as substance abusers and the physically or mentally handicapped, on an emergency, transitional, or permanent basis. It is anticipated that a variety of local, nonprofit service agencies will apply for monies from State or Federal sources such as the State Emergency Shelter Program and/or McKinney Act funded programs.

The City's CDBG funds will continue to be utilized for a variety of homeless programs. In the past, applications have been funded for costs related to operating a seasonal homeless emergency shelter, mortgage assistance to purchase a transitional facility, costs related to operation of a battered women's emergency shelter, supportive services related to food provision at an emergency shelter, etc. It is expected that these types of programs will continue to be funded on an annual basis.

Funding/Administration: Both State and Federal governments have allocated monies to assist in the provision and operation of housing facilities for the homeless. Administration of individual projects will be the responsibility of the nonprofit agency initiating the application.

For CDBG funding, application is made by local nonprofit organizations to the City of Redding during the CDBG program's application period, usually in February of each year. All applications are considered on a competitive basis.

Proposed Changes: None proposed.

Objective: To assist in the provision of shelter and services to the area's homeless population.

6.3 ACTIVITY: **After-Care Program**

Description: The Redding Housing Authority currently operates a supportive housing program for persons with mental, developmental, or physical disabilities. The program is able to offer rental subsidies to individuals who are receiving a variety of supportive services through State-approved organizations. The program currently has 16 one-bedroom subsidies, 3 two-bedroom subsidies, and 1 three-bedroom subsidy.

Funding/Administration: The Redding Housing Authority administers the housing subsidy portion of the program. A variety of service organizations provide the supportive services portion of the program.

Proposed Changes: None proposed.

Objective: To continue to provide rental assistance to this targeted population to enable them to live independently in the community.

6.4 ACTIVITY: **HOPE for Elderly Independence**

Description: This program was developed by HUD as part of the overall HOPE legislation in 1990. It is considered a demonstration program to test the effectiveness of combining rental assistance with supportive services to help frail elderly persons live independently.

Funding/Administration: Funding for 76 HOPE subsidies was received in 1992. The rental subsidies are administered by the Redding Housing Authority with the HOPE coordinator function contracted to a local service provider. The service coordinator is responsible to assess the frail elderly eligibility issue and coordinate the receipt of support services needed by the HOPE participant.

Proposed Changes: The HOPE demonstration project terminates June 30, 1999. The HOPE coordinator will assist the participants to transition into the newly funded Multipurpose Senior Services Program (MSSP) to be administered by a local, nonprofit senior-services organization, Golden Umbrella.

Objective: To secure project-based subsidies for a to-be-developed affordable housing project to ensure continued affordability of housing to the frail elderly population.

6.5 ACTIVITY: **Family Unification Program**

Description: The program, which was enacted by Congress in 1990, is designed to help prevent the unnecessary separation of children from their families because of homelessness and housing problems. The program provides housing assistance through the Section 8 Program to families who meet regular eligibility criteria and whose children are at risk of placement in out-of-home care or delayed in returning from care, because of homelessness or severe housing problems.

Funding/Administration: Funding is by competitive application direct to HUD. In 1994, the Redding Housing Authority was awarded 25 certificates under this program. The program is administered by the Redding Housing Authority in conjunction with the Shasta County Child Protective Services Agency.

Proposed Changes: The demonstration cycle for the Family Unification Program terminates May 31, 1999. At this time, the Redding Housing Authority is not seeking additional funds for this program.

Objective: The Redding Housing Authority successfully completed the five-year demonstration project. During the five-year period, over 68 households were assisted with rental subsidies.

GOAL H7: PROMOTE ACHIEVEMENT OF ECONOMIC SELF-SUFFICIENCY FOR ALL PROGRAM PARTICIPANTS

(See also Activity 4.1)

7.1 *Program Name:* **Family Self-Sufficiency (FSS) Program**

Program Description: This program was developed by HUD as part of the overall HOPE legislation in 1990. It builds upon the experience of two prior HUD initiatives, Project Self-Sufficiency and Operation Bootstrap. Like these two initiatives, Family Self-Sufficiency strives to assist very low-income households achieve financial independence through a combination of rental subsidies and supportive services.

Funding/Administration: Funding is by competitive application direct to HUD. In July 1992, the Redding Housing Authority received its initial FSS allocation of 35 subsidies, effective FY 1993. Since that time, the Redding Housing Authority has increased the number of participants under this program to 94 households.

Proposed Changes: To the extent possible, the FSS model of encouraging personal responsibility towards achieving self-sufficiency will be utilized on other subsidy programs.

Objective: To assist all participants achieve the highest possible level of self sufficiency and economic independence, free from public assistance.

Recreation Element

Recreation Element

INTRODUCTION

PURPOSE AND CONTENT

The purpose of the Recreation Element is to identify and document present park facilities; compare such facilities with current and long-term needs; establish attainable goals and objectives to meet the community's needs; and develop and adopt programs and plans which will accomplish the community's recreation goals.

Background data and information for this element are contained within Chapter 8 of the City of Redding *General Plan Background Report*.

Specific topics addressed within this element include:

- Natural and Scenic Open Areas.
- Regional River Parkway.
- Archaeological and Historic Resources (as they relate to park and recreation sites).
- Park Planning and Development.
- Compatibility with Adjacent Land Uses.
- Facility Funding and Management.
- Recreation Programs.
- Citywide Trail System.
- Vandalism and User Safety.

The Recreation Element is intended to be used as a coordinating document by all levels of government involved in planning and community development and the management and development of park, recreation, and open-space resources within the Redding Planning Area.

The Recreation Element should also be consulted by property owners, developers, and public officials before preparing land-use applications for consideration by the City. Whenever community issues affecting park, recreation, or open space are being discussed, it is appropriate to refer to the text and map exhibits of this element.

AUTHORITY

Government Code Section 65560(b)(3) specifies that open space for outdoor recreation be addressed in a community's General Plan. Although many jurisdictions choose to discuss this topic within their Open Space Element, Government Code Section 65303 states that the General Plan may include other elements, such as a Recreation Element, as long as they relate to the physical development of the City. Because of the importance of recreation to the Redding community, the City has adopted a separate "Recreation Element" since 1985.

GOALS AND POLICIES

To meet the needs of a growing and diverse population, recreational programs and park facilities play a critical role in community safety and in determining our quality of life. They can provide resources to combat juvenile delinquency, gangs, and antisocial behavior. They help develop values, life skills, and experiences of people, particularly our youth, that lead to healthy, socially responsible and productive lives. They can promote opportunities for citizens to be volunteers and advocates, enhancing communication and creating a sense of ownership in our community.

Background information for this element identifies several deficiencies in meeting Redding's park and recreation needs, particularly Neighborhood and Community Parks. The challenge to recreation and park providers is to balance the community's desire for a full spectrum of park facilities and recreation programs with the reality of limited resources.

It is recognized that new development can be beneficial to a city. However, it must be balanced with the realization that growth without "quality of life" as a critical component is not beneficial and ultimately counterproductive. This is a concern held by many Redding residents and community groups. In fact, this concern has resulted in several unique private/public partnerships to enhance park and recreation facilities such as the Sacramento River Trail, Turtle Bay Museum, Redding Arboretum, and Kids Kingdom—a portion of Enterprise Community Park.

To meet the community's desire for not only large public parks, but also smaller neighborhood-oriented facilities and improved open space, expansion of the private/public partnership concept and existing public partnerships is proposed within this element. The private/public partnership approach places more responsibility on the private sector for providing small neighborhood-oriented amenities to serve individual subdivisions and allows the City to direct a larger portion of its resources toward the community's broader park and recreation needs. Expansion of existing public partnerships emphasizes the collocation of parks with schools and utilization of joint use and maintenance agreements to maximize efficiencies. Implementation of both approaches is considered necessary in order to provide and maintain the full range of park and facility types that is desired.

As population and the density of development within the Planning Area continue to increase, park, recreation, and open-space areas will become even more important to the community. At the same time, the availability of suitable parklands will decrease as potential sites are developed. Therefore, it is essential that suitable sites for public parks, trails, and other recreational features be identified and acquired well in advance of their actual need and, at times, before funding sources for facility development have been established to ensure that adequate lands will be available to meet long-term needs.

This section includes goals and policies designed to address the primary recreation and park development issues. The goals, policies, and exhibits contained in this element will serve as the framework for meeting the City's ongoing park and recreation needs.

NATURAL AND SCENIC OPEN AREAS

The City of Redding is fortunate to have a variety of natural, scenic, and open-space features throughout the community. The most important of these is the Sacramento River, which essentially bisects the City. The river is viewed as a focal point of the community. Development of a Regional River Parkway has long been envisioned as a multijurisdictional project that would maximize and enhance the recreational potential of the river. Therefore, efforts to plan and design the City's recreational system should focus on maximizing and protecting this resource.

GOAL **R1** — RECOGNIZE THE SACRAMENTO RIVER AS THE BACKBONE OF THE CITY'S PARK SYSTEM.

Policies to achieve this goal are to:

R1A. Prepare a Regional River Parkway Plan for areas along the Sacramento River between Shasta Dam and the City of Anderson to address:

- Resource protection.
- Recreational opportunities.
- Location of existing and proposed facilities.
- Recommendations for speed limits and use restrictions on the River, where warranted.
- Acquisition of lands.
- Management and operations.
- Financing.

R1B. Preserve native trees and riparian and other natural vegetation along the Sacramento River by incorporating these features into park designs, where feasible.

R1C. Plan and implement a public trail along the Sacramento River that also provides connections, where feasible, to school facilities and other destination points.

R1D. Protect and enhance public, fire, and rescue access along the entire riverfront, while minimizing/ mitigating impacts to the fullest extent possible.

R1E. Educate the public on responsible use of the river and on the economic benefits, such as increased tourism, that can result from protecting and enhancing the Sacramento River corridor.

GOAL **R2** — PRESERVE AND ENCOURAGE THE JUDICIOUS DEVELOPMENT OF THOSE NATURAL RESOURCE AREAS WHICH HAVE A UNIQUE RECREATION POTENTIAL.

Policies to achieve this goal are to:

R2A. Establish park sites and public open-space areas along the river and tributary creeks through public and private land purchases, land dedications, easements, and similar mechanisms.

R2B. Promote the use of native plants, particularly valley oaks, where appropriate in park and natural open-space areas.

ARCHAEOLOGICAL AND HISTORIC RESOURCES

Redding is rich in both archaeological and historic resources. Because park and recreational facilities are often located adjacent to waterways or woodland areas, there is a high probability that archaeological, historic, or cultural resources will be encountered within sites proposed for park and recreation use. Depending on the type of resource involved, these features can often be incorporated into facility designs.

GOAL **R3** — PRESERVE AND ENHANCE REDDING'S HISTORIC AND CULTURAL HERITAGE IN THE PROCESS OF PARK DEVELOPMENT.

Policies to achieve this goal are to:

R3A. Protect and enhance historically-significant structures and resources located in park and open-space lands.

R3B. Ensure that park-development and parkland-acquisition proposals consider potential impacts to historical or archaeological resources and minimize or eliminate those impacts to the fullest extent possible.

R3C. Integrate historic resources into park developments, where possible.

PARK PLANNING AND DEVELOPMENT

The City utilizes the following specific descriptions for various types of recreational lands. These descriptions include:

- Open Space.
- Neighborhood Parks.
- Large Community Parks.
- Special Purpose Facilities.
- Trails.

- Private Neighborhood Parks and Improved Open Space.
- Joint School/Park Facilities.

Open-Space Areas are usually maintained in a relatively natural condition and provide for extremely low-impact, passive recreation uses. These areas often contain steep slopes, floodplains, scenic viewsheds, or sensitive habitats. Given the natural condition of these areas, open space is not considered as "parkland" under Goal R4.

Neighborhood Parks are fully developed parks which typically contain a variety of active recreational facilities such as playgrounds, picnic areas, basketball or tennis courts, and open play areas. These facilities are intended primarily for unorganized recreational activities and divided into two categories:

- **Small Neighborhood Parks** (generally 5 acres or less in size).
- **Large Neighborhood Parks** (typically 5 to 10 acres or more).

Large Community Parks are also fully developed parks, generally 40 or more acres in size, which contain a variety of active recreational facilities such as sports fields, picnic areas, basketball or tennis courts, and playgrounds. Unlike both categories of Neighborhood Parks, these facilities are often utilized for organized recreational programs.

Special Purpose Facilities are developed for a focused or highly specialized purpose. Examples include boat ramps, campgrounds, sports field complexes, public pools, public golf courses, skateboard parks, indoor or outdoor archery facilities, etc.

Trails are linear facilities that can be single- or multipurpose in nature. Surfacing materials, widths, and designs vary depending on the intended function and/or anticipated user group.

Private Neighborhood Parks and Improved Open-Space Areas are developed, owned, and maintained by the private sector. These facilities may include tot lots, playgrounds, picnic facilities, open play areas, and/or streets and other landscaped areas designed for more passive recreational uses or visual enhancement. These facilities are typically constructed as an integral part of and simultaneously with residential development projects. Active park facilities and/or passive landscaped areas are encouraged. Additional amenities, such as pools, tennis courts, and basketball courts, may also be provided. The size of these parks varies; however, they are typically smaller than public neighborhood parks.

Joint School/Park Facilities include all public park areas that are located adjacent to or collocated with schools. In some instances, the City may not own any of the facilities, but operates programs from school-owned buildings and property. Joint-use agreements are typically utilized to address public use of school facilities and maintenance.

Park and recreation areas have historically been public facilities. However, in the face of dwindling resources, new approaches to providing park and recreational amenities are needed. The development and maintenance of small parks or improved open-space areas designed to serve an individual subdivision or group of small subdivisions are encouraged to become a private-sector responsibility. In turn, the City will direct a larger portion of its resources toward addressing broader community needs through the development of Small Neighborhood, Large Neighborhood, and Community Parks. The City will also attempt to maximize facility development and utilization by collocating parks with schools whenever practical. In order to ensure that the needs of all segments of the population are considered, opportunities for public input and participation should be provided during all aspects of park and recreation planning.

Beyond acquisition of adequate parkland, another important issue to the community is the need for full development of the land that is acquired. Therefore, policies have been incorporated supporting construction of new or undeveloped park sites. In order to ensure that an adequate amount of improved parkland is provided as growth and development occurs, many jurisdictions adopt specific standards which identify the community's desired level of improved parkland acreage per 1,000 population. Within the City of Redding, the desired standard is ten acres per 1,000. This figure includes: developed and undeveloped parks that are owned and maintained by the City, such as Small and Large Neighborhood Parks; Community Parks; Special Purpose Facilities; parkland adjacent to schools in instances where the land is

publicly owned; and parkland and play areas associated with school-owned recreational facilities, where long-term, joint-use agreements have been established; trails, improved open-space areas within residential developments, and private neighborhood parks. Not included are (1) school facilities where no long-term, joint-use agreements are in effect and (2) open space.

The locations of existing public park facilities and/or private facilities accessible to the general public are shown on Appendix "A." Figure 7-1 identifies general locations where future parks will be needed based on proposed development densities depicted on the General Plan Diagram. The locations illustrated on Figure 7-1 should not be considered site-specific. The purpose of the figure is to identify the types of public park facilities that will be needed based on buildout of the General Plan and their approximate distribution.

GOAL

R4

PROVIDE A MINIMUM OF TEN ACRES OF IMPROVED PARKLAND PER 1,000 POPULATION AND A BROAD RANGE OF FACILITY TYPES.

Policies to achieve this goal are to:

R4A. Develop and implement a Citywide Parks and Recreation Master Plan.

R4B. Construct a regional sports complex in the vicinity of Old Oregon Trail and Viking Way to meet existing and future needs for softball, baseball, soccer, equestrian, and similar facilities.

R4C. Locate at least one Large Community Park in each quadrant of the City (refer to Figure 7-1) as indicated generally on the General Plan Diagram.

R4D. Accept only parkland that is consistent with the City's site, locational, and development requirements.

R4E. Acquire Large Neighborhood and Community Park sites well in advance of their actual need.

R4F. Explore nontraditional methods for acquiring park and recreation land.

R4G. Disperse park facilities and equipment throughout the community to prevent an undue concentration in any one area.

R4H. Locate parks adjacent to school facilities, whenever possible, to maximize recreational opportunities and joint use of facilities.

R4I. Establish agreements with local schools which will allow other agencies, groups, or members of the public to use special facilities and grounds (such as multipurpose rooms, gymnasiums, sports fields, basketball courts, etc.) during times when school is not in session to accommodate additional community and recreational activities. Where such agreements are in effect, the facilities may be included in the City's parkland inventory.

R4J. Increase the acreage and quality of developed park facilities by placing a priority on:

- Building out existing Large Neighborhood and/or Community parks that are underdeveloped.
- Encouraging developers of large residential projects to dedicate land and build out park sites.
- Encouraging community-based park improvements such as gifts or community- improvement projects.
- Coordinating improvements and programs with nonprofit organizations, schools, other agencies, and private-sector providers to avoid duplication of facilities and programs.

R4K. Encourage collocation of public and private parks with flood-control facilities, such as stormwater detention basins, where appropriate, to maximize the efficient use of land.

R4L. Pursue the acquisition of surplus Federal, State, and local lands, where appropriate, to meet present and future park and recreation needs.

R4M. Work with citizens groups and other agencies to prioritize development of and identify

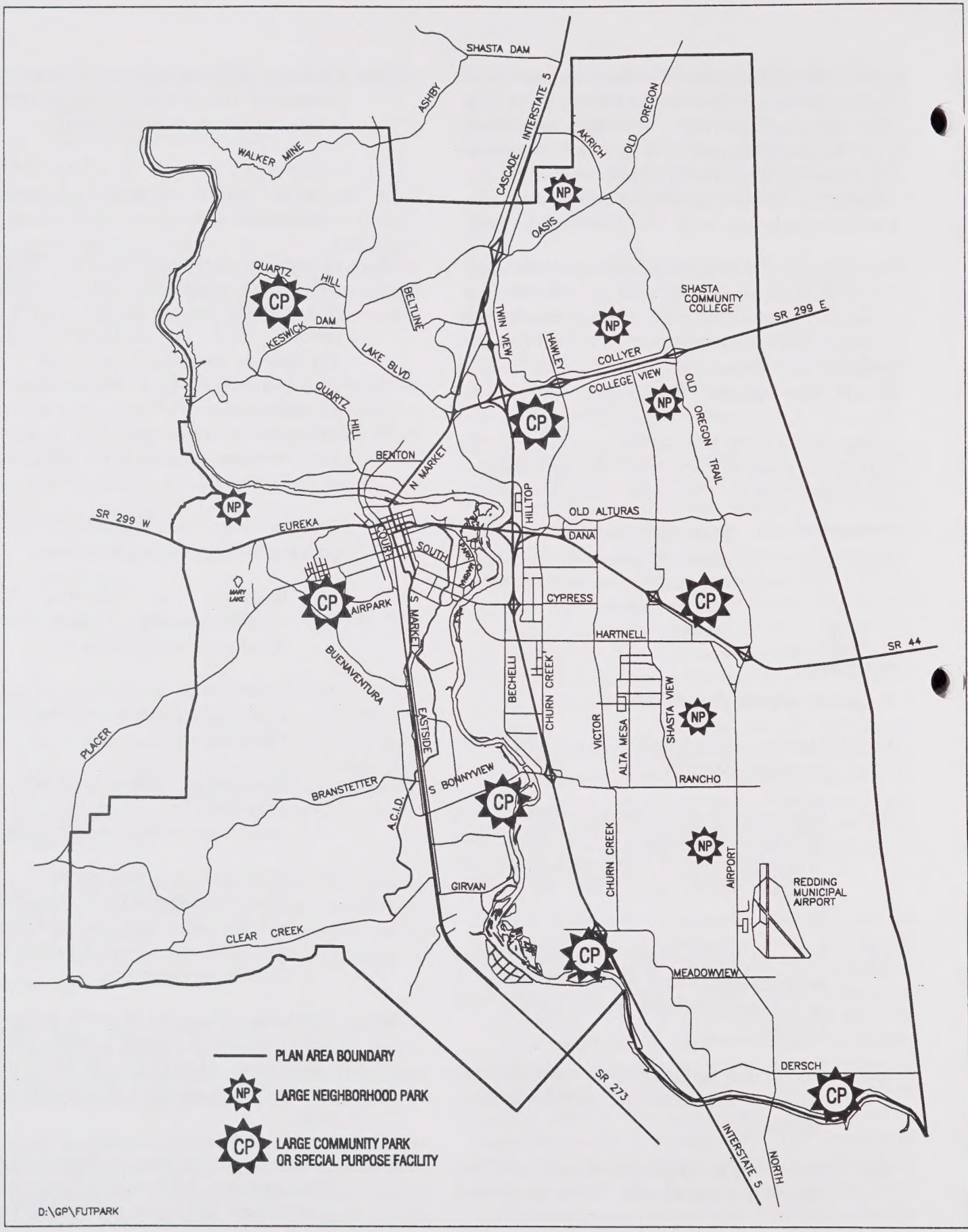


Figure 7-1 Future Parks (Conceptual Locations)

appropriate locations for Special Purpose Facilities. Facilities to be considered may include a public golf course, sports field complexes, indoor or outdoor archery facilities, an indoor or outdoor pool complex.

GOAL

R5

ENSURE THAT NEW DEVELOPMENT CONTRIBUTES TO THE PARK, RECREATION, AND IMPROVED OPEN-SPACE NEEDS OF THE CITY.

Policies to achieve this goal are to:

R5A. Develop standards that will result in new residential projects providing appropriate levels of improved open-space and/or recreational amenities.

R5B. Continue to require developers of residential property to contribute park sites or pay in-lieu fees at the maximum rate allowed by State law.

R5C. Provide a partial credit toward in-lieu fees, parkland dedication requirements, and/or park development fees for:

- Construction of private recreation facilities, improved open-space areas, and parks.
- Recreational amenities constructed within existing public park facilities or schools where a long-term, joint-use agreement is in effect.
- Private development of new public parks.

R5D. Adjust parkland in-lieu fees regularly to reflect current land values.

GOAL

R6

CREATE AN AWARENESS THAT RECREATIONAL PROGRAMS AND PARK FACILITIES SERVE A COMMUNITY-SAFETY NEED. PROVIDE A MIX OF RECREATION PROGRAMS AND PARK FACILITIES THAT APPEALS TO ALL AGE, ECONOMIC, SOCIAL, AND ETHNIC GROUPS IN THE COMMUNITY.

Policies to achieve this goal are to:

R6A. Monitor population, age, economic, and ethnic ratios to ensure that recreation programs and park facilities meet the most pressing needs.

R6B. Explore the creation of recreation-based programs and park facilities in conjunction with law enforcement, schools, local colleges, and community groups that address current social concerns for youth violence, crime, and drug problems.

R6C. Program recreation activities jointly with schools and local colleges, where possible.

GOAL

R7

ENCOURAGE SHASTA COUNTY TO PROVIDE PARKLAND AND RECREATION PROGRAMS IN THOSE UNINCORPORATED SECTORS OF THE REDDING PLANNING AREA IN WHICH URBANIZATION IS PERMITTED BY THE COUNTY.

Policy to achieve this goal is to:

R7A. Encourage the County to acquire and improve Neighborhood Parks as a part of the subdivision development process.

GOAL

R8

PROMOTE A REGIONAL APPROACH TO RECREATION FACILITY AND PROGRAM PLANNING/DEVELOPMENT.

Policy to achieve this goal is to:

R8A. Encourage a regional approach to the provision, planning, and development of recreation facilities and programs by promoting cooperation with school districts, special service districts, neighboring communities, Shasta County, and the Federal government. Recognize that policies and programs restricted to jurisdictional boundaries can impede the provision of high-quality facilities and programs that benefit the citizens of Redding.

COMPATIBILITY WITH ADJACENT LAND USES

Although park facilities are typically viewed as an asset to the community and its residents, there are some impacts associated with certain types of park activities and features that may be incompatible with surrounding residential development. The introduction of night lighting for organized sporting events such as softball, football, and soccer; noise generated by organized sport activities that attract large numbers of users or spectators; and increased traffic and parking demands all have the potential to adversely impact surrounding residential neighborhoods.

GOAL **R9** — MINIMIZE THE IMPACTS OF RECREATIONAL FACILITIES ON ADJACENT RESIDENTIAL DEVELOPMENT.

Policies to achieve this goal are to:

R9A. Avoid the installation of sports-related lighting in Neighborhood Parks and elementary schools where it will impact residences of the neighborhood; appropriate mitigation features shall be incorporated where such lighting is allowed.

R9B. Minimize to the fullest extent the impacts of sports field lighting at Large Community Parks, junior high schools, and high schools on adjacent residential uses. Mitigation may include:

- Restrictions on the height, wattage, or orientation of lighting equipment.
- Shielding requirements for light fixtures.
- Limitations on the times the lights may be utilized.
- Installation of vegetative screens where playing fields abut adjacent residential uses.

R9C. Locate Large Neighborhood and Community Parks on collector or arterial streets to ensure that adequate access and road capacity are available to serve the facilities.

R9D. Install signage, traffic-safety features, and traffic-calming devices as necessary to reduce traffic speeds in residential areas surrounding parks and provide for the safety of pedestrians and bicyclists.

R9E. Provide sufficient off-street parking to accommodate anticipated parking demands generated by park and recreation facilities.

R9F. Locate parking areas for park and recreation uses away from abutting residential uses, where possible. Where no other reasonable location for off-street parking areas exists, screening shall be provided along adjacent residential properties. Screening may include solid fencing and/or vegetative buffers.

R9G. Locate active recreation features and amenities, such as sports fields, bleachers, playgrounds, and pools, away from adjacent residential uses whenever possible.

FACILITY FUNDING AND MANAGEMENT

Acquiring adequate funding for park development and ongoing maintenance is a challenge. Since the level of funding ultimately determines the level and quality of recreational opportunities that are provided, the City will need to consider and implement a variety of funding and management strategies for its park and recreation facilities.

GOAL **R10** — ESTABLISH ADEQUATE FUNDING MECHANISMS TO IMPLEMENT THE FACILITY AND PROGRAM NEEDS IDENTIFIED IN THIS ELEMENT.

Policies to achieve this goal are to:

R10A. Adjust park-development fees regularly to reflect current park-development costs.

R10B. Explore innovative means of financing new facilities and maintaining existing and future

parks such as the creation of a park and recreation district or similar measure.

R10C. Establish an "Adopt a Park" program to encourage volunteer groups, service clubs, and other members of the private sector to assist with the development and maintenance of park and recreation facilities. If ongoing maintenance is an issue, innovative ways of providing this service need exploration and should not prohibit development of these park and recreation facilities.

R10D. Pursue joint development and service agreements with elementary and high school districts.

CITYWIDE TRAIL SYSTEM

The topography and natural setting of Redding, including the Sacramento River and its numerous tributary creeks, provide outstanding opportunities for bicycle and pedestrian travel. As discussed earlier in this element, development of a Regional River Parkway along the Sacramento River between Shasta Dam and Anderson, has long been envisioned as a multijurisdictional project that would maximize and enhance the recreational potential of the river. Development of a citywide recreational trail system, which links residential uses to commercial, industrial, recreation, and other public uses, is also considered a priority. Additional goals and policies regarding commuter bicycle and pedestrian facilities are contained the Circulation Element.

A conceptual plan for trails is depicted on Figure 7-2. However, a detailed Citywide Trails Master Plan is needed to more specifically locate, prioritize, and identify funding sources for public recreational trail development. It is also important that the plan address interfaces between public trails and private property to protect the security and privacy of adjacent residents.

Similar to the need to acquire suitable lands for public parks at the earliest opportunity, it is also essential that the City continually work to acquire necessary land dedications and easements for public trails through a combination of direct purchases and the discretionary approval process for new development and redevelopment projects. In many areas along the Sacramento River and creek corridors, development has already occurred before dedications and easements for public trail purposes were required. Acquisition in these areas will be more challenging and need to occur on a gradual basis as opportunities arise. It is possible that formal trail improvements will not be completed at some locations within the projected 20-year life of this General Plan. However, the acquisition, land dedications, and easements should still be pursued so that public access opportunities and future options for additional trail development are protected. Where continuous trails cannot be provided or are not feasible, connections to the City street system can serve to link trail sections.

GOAL **R11**

PROMOTE AND FACILITATE DEVELOPMENT OF A CITYWIDE RECREATIONAL TRAIL SYSTEM.

Policies to achieve this goal are to:

R11A. Develop a Citywide Trails Master Plan to specifically locate future trails. In general, the trail system should:

- Focus on linking neighborhoods to other land uses and significant destination points within the community.
- Separate bicyclists and pedestrians from vehicular traffic and pedestrian facilities from bicycle facilities, whenever feasible.
- Provide continuous trail connections, including a looped system around the City.

R11B. Continue development of the Sacramento River Trail to establish a common and continuous thread along the river corridor, connecting recreational, educational, cultural, commercial, and residential areas/uses.

R11C. Until such time as the Citywide Trails Master Plan is adopted, utilize Figure 7-2 as a guide to establish trails that provide links to schools as well as trails and trail connections along open-space corridors.

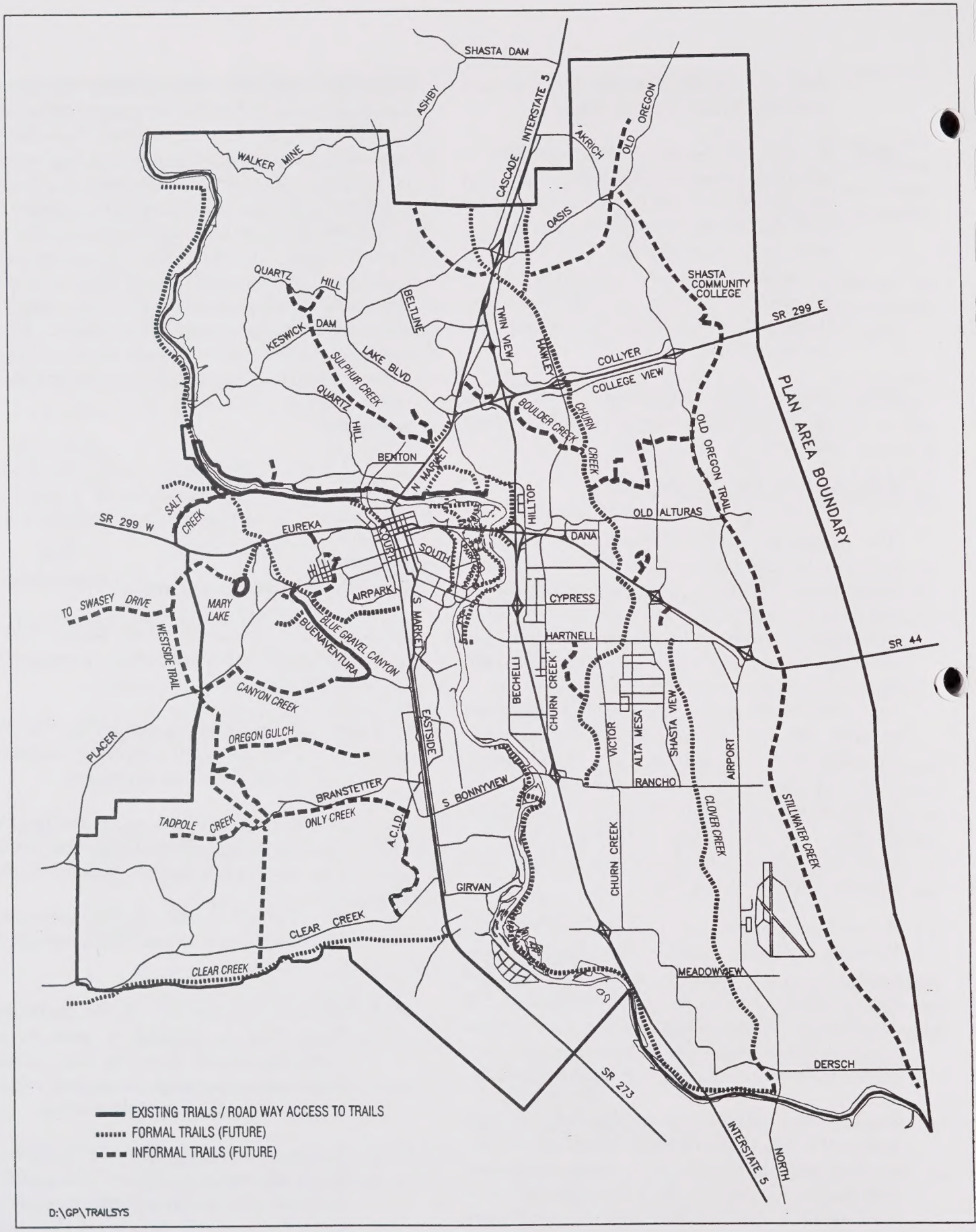


Figure 7-2 Trail System

R11D. Continue to obtain land dedications and/or easements for the development of public trails and the Regional River Parkway through direct purchases and the discretionary approval process for new development. Until such time as a Citywide Trails Master Plan is developed, utilize Figure 7-2 to determine appropriate trail corridors.

R11E. Pursue funding which can be used for parkway and trail-system planning, land acquisitions, construction, and maintenance.

R11F. Design bicycle and trail systems in a manner that protects the privacy and security of adjacent land uses, allows for easy maneuvering, and promotes user safety.

R11G. Encourage the establishment of volunteer bicycle-path/recreation-trail patrols to improve the real and perceived level of safety for users of those facilities.

REGIONAL RECREATIONAL OPPORTUNITIES

This plan envisions that the citywide trail system will complement and become an integral component of a regional trail and recreation system. Much work has been accomplished to date by various agencies and organizations to lay the foundation for a number of recreation/natural areas and regional trails. This includes establishment of right-of-way and construction of a portion of the "Westside Trail," organizing efforts to extend the Sacramento River Trail from Redding to the Interlakes Recreation Area and planning for a trail connection between the Sacramento River and the Whiskeytown National Recreation Area along Clear Creek. Completion of these trails, together with the City's trail system, will provide invaluable recreational opportunities. Further, with the establishment of the Horsetown-Clear Creek Preserve, additional public lands are available for passive recreational pursuits. As Redding's population continues to grow in the coming decades, the opportunity these areas will offer will become even more appreciated by citizens of Redding.

GOAL R12 — PROMOTE AND FACILITATE THE DEVELOPMENT OF A REGIONAL RECREATION AND TRAIL SYSTEM THAT WILL COMPLEMENT THE CITY'S TRAIL SYSTEM.

Policy to achieve this goal is to:

R12A. Encourage efforts to develop recreational opportunities in those natural areas neighboring the City, including the Horsetown-Clear Creek Preserve, the Westside Trail, the Clear Creek Trail, and extension of the Sacramento River Trial from Redding to the Interlakes Recreation Area at Shasta Dam.

VANDALISM AND USER SAFETY

Studies of public attitudes have found that the level of use and enjoyment of recreational facilities are directly related to an individual's perceptions regarding personal safety. Since the City has invested and will continue to invest significantly in the development of park and recreational facilities, it is essential that the topics of vandalism and improved park safety be addressed.

GOAL R13 — REDUCE THE PREVALENCE OF VANDALISM AND INCREASE THE LEVEL OF SAFETY IN PARK FACILITIES AND OPEN-SPACE LANDS.

Policies to achieve this goal are to:

R13A. Plan for safe and secure park and recreation areas.

R13B. Incorporate security lighting and other design features within park and recreation facilities to reduce vandalism and improve user safety, while protecting surrounding residential uses from excessive light and glare.

R13C. Consider providing park hosts for all larger parks.

R13D. Establish a policy of zero tolerance for vandalism.

APPENDIX "A"
RECREATION ELEMENT

PARK AND RECREATION FACILITIES BY TYPE				
DEVELOPED AND UNDEVELOPED PARK SITES				
Map No.	Park	Acres	Developed Acres[1]	Description of Facilities
Small Neighborhood Parks				
1	Amethyst Park	.61		Picnic area, playground area, turf grass, handicapped access
2	Bedrock Park **	.50		Undeveloped
3	Benton Airpark *	2.30		Parking lot, picnic area, turf grass
4	Bobwhite Park	.43		Playground area, turf grass
5	Carnelian Park	.50		Basketball court, picnic area, turf grass
6	Churn Creek Heights **	1.00		Undeveloped
7	Clover Creek Park *	2.75	1.00	Basketball court, picnic area, playground area, turf grass
8	Country Heights Park	3.59	1.50	Basketball court, picnic area, playground area, turf grass
9	Creekside Park	.87		Basketball court, picnic area, playground area, turf grass, handicapped access
10	Foothill Park	3.25		Turf grass
11	Foxtail Park	1.00		Basketball court, picnic area, playground area, turf grass
12	Graham Park	.40		Parking lot, picnic area, turf grass
13	Hacienda Heights, Unit 5 **	1.23		Undeveloped
14	Hawn Avenue Park	.31		Picnic area, playground area
15	Indian Hills Park	1.40	.75	Basketball court, picnic area, playground area, turf grass, handicapped access
16	Library Park	.30		Historical, parking lot, picnic area, turf grass
17	Martin Luther King Jr. Park	3.30		Baseball field, basketball court, horseshoe court, parking lot, picnic area, playground area, restrooms, turf grass, handicapped access, multipurpose building, shade structure
18	Meadow Creek Park *	2.00		Turf grass
19	Minder Park	1.00		Basketball court, picnic area, playground area, turf grass, handicapped access
20	Northridge Gardens Park	.75		Picnic area, turf grass, handicapped access, shade structure
21	Old City Hall Park	.10		Historical, arboretum/museum
22	Peppertree Park	2.00		Basketball court, picnic area, playground area, trail, turf grass
23	Rancho Estates Park **	3.27		Undeveloped
24	Ravenwood Park	.76		Picnic area, playground area, turf grass, handicapped access
25	River Park Highlands **	1.92		Undeveloped
26	River Park Highlands, Unit 2 **	1.21		Undeveloped
27	River Ridge Park I **	1.90		Undeveloped
28	River Ridge Park II **	2.00		Undeveloped
29	Rolling Hills Park	1.28		Basketball court, turf grass
30	Rosetree Park **	2.00		Undeveloped
31	Stillwater Heights Park	1.85	1.00	Basketball court, picnic area, playground area, turf grass, handicapped access
32	Summerfield Meadows **	2.26		Undeveloped
33	Tourmaline Park **	.50		Undeveloped
34	T.R. Woods Memorial Park	3.00		Basketball court, parking lot, playground area, turf grass, shade structure
35	Valley Ridge Park	1.47	1.00	Basketball court, picnic area, turf grass
36	Vista Ridge **	.92		Undeveloped
37	Waverly Park **	.60		Undeveloped
38	Western Oaks Park	2.10		Basketball court, picnic area, playground, turf grass, handicapped access

DEVELOPED AND UNDEVELOPED PARK SITES				
Map No.	Park	Acres	Developed Acres[1]	Description of Facilities
39	Whistling Park **	2.00		Undeveloped
40	Wilson Street Park **	3.00		Undeveloped
41	Victoria Knolls **	5.00		Undeveloped
	TOTAL	66.63		
Large Neighborhood Parks				
42	Alta Mesa Park	6.76		Baseball field, parking lot, picnic area, playground area, restroom, tennis court, turf grass
43	Blossom Park **	5.90		Undeveloped
44	Hacienda Heights **	6.60		Undeveloped
45	Lake Redding Park	10.00		Historical, horseshoe court, parking lot, picnic area, playground area, restrooms, trail, turf grass, fishing access, shade structure
46	Mary Lake Park *	30.00	25.00	Picnic area, trail, fishing access
47	Ridgeview Park* 2150 Cumberland Drive	6.06	1.90	Basketball court, picnic area, playground area, turf grass, handicapped access
	TOTAL	65.32		
Community Parks				
48	Buckeye Park*	30.00	9.40	Baseball field, parking lot, picnic area, restrooms, tennis court, trail, turf grass
49	Caldwell Park	70.00		Baseball field, basketball court, boat ramp, historical, arboretum/museum, parking lot, picnic area, playground area, restrooms, soccer field, swimming, trail, turf grass, handicap parking, fishing access, multipurpose building
50	Cascade Park*	27.64	4.00	Basketball court, parking lot, picnic area, playground area, trail, turf grass, fishing access
51	Enterprise Park *	94.60	30.00	Basketball court, parking lot, picnic area, playground, restrooms, soccer field, roller hockey, tennis court, turf grass, handicapped parking, shade structure
52	South City Park	20.00		Baseball field, parking lot, picnic area, playground area, restrooms, tennis court, turf grass, multipurpose building
53	Twin View Park **	41.20		Undeveloped
	TOTAL	283.44		
Joint School/Park Facilities				
54	Enterprise High School	4.00		Parking lot, soccer field, swimming
55	Parsons Jr. High School	4.00		Baseball field, parking lot, restrooms, soccer field
56	Sequoia Middle School	4.00		Parking lot, soccer field, tennis court
	TOTAL	12.00		
Special Purpose Facilities				
57	Community Garden Center*	18.00	10.00	Parking lot, restrooms
58	Riverfront Park*	17.00		Boat ramp, parking lot, picnic area, restrooms, turf grass, fishing access
59	Riverland Drive **	54.00		Undeveloped
60	Rodeo Grounds	12.00		Rodeo arena, bleachers, restrooms, parking lot
61	Senior Citizen Hall	1.95		Parking lot, restrooms, handicapped access, multipurpose building
62	Softball Park	4.40		Baseball field, parking lot, restrooms
63	South Bonnyview Boat Launch	6.10	5.00	Boat ramp, parking lot, restrooms, handicapped access, fishing access
64	Sulphur Creek Park **	10.00		Undeveloped
65	Treatment Plant **	272.00	.50	Undeveloped
66	Turtle Bay East*	85.00		Parking lot, fishing access
	TOTAL	480.45		
	TOTAL ALL FACILITIES	907.84		

* Partially Developed
** Undeveloped
[1] If different than total acreage

Source: City of Redding Development Services Department, January 1996.

Apendix A Park Locations

Economic Development Element

Economic Development Element

INTRODUCTION

PURPOSE AND CONTENT

Economic development has received increasing attention over the past several decades as the region's natural resource-based and other industries have declined. Between 1988 and 1997, Shasta County lost 30 percent of its manufacturing base, or about 1,400 manufacturing jobs. During this same period, employment in the retail/service sector has increased dramatically, resulting in an over-concentration of low-wage jobs. While significant gains have been made over the years to attract additional industries to the area, it is clear that a multifaceted approach to economic development will bring increasing benefits. This approach must recognize the importance of attracting and retaining higher-paying primary industry and jobs and other types of industry that demonstrate strong economic benefit to the city and its citizens, while maintaining a commitment to creating a community that is attractive and well-planned. Redding should provide a rich cultural and recreational environment and display a commitment to its historic Downtown. It will take a sustained effort on these fronts to realize the growth in the economy and job base that is considered essential by the community. No single policy or approach will be as successful as a coordinated effort made in these areas.

This element establishes the basic framework that will guide economic growth over the coming years. Its underlying premise is threefold: First, the element recognizes the importance of attracting (and retaining) high-paying, primary industry jobs to the community. It recognizes that the growth in small- and medium-sized businesses will represent the best potential for job growth over the long term. This can be accomplished by focusing efforts on attracting new industry, assisting existing local firms to grow, and ensuring that adequate infrastructure is provided.

Second, the element places importance on quality of life—on establishing a greater sense of community. It strives to create a city that has ample cultural, entertainment, and recreational opportunities. It also emphasizes the economic benefits that can be realized from attracting and accommodating additional convention activity. Together with the other elements of this Plan, the strategy also strives to create a more visually pleasing community by establishing policies that will result in more attractive streets and a better harmony between different land uses. In short, creating a community that will be sought out by business owners who value these attributes in a community in which they want to live as well as invest.

Third, the element recognizes the importance of generalized economic activity such as the retail and service industries. Service jobs, particularly for the medical industries, provide excellent wages and benefits. A healthy retail base provides the City with needed sales tax revenue to fund police and fire services as well as planning, parks, and other vital City functions.

This General Plan element complements existing City of Redding Council policies and establishes direction and guidelines concerning how and where the City of Redding's economic development efforts will be concentrated to obtain the greatest potential long-term returns. Guiding policies include the following topical areas: Business Attraction, Business Retention and Expansion, Use of Incentives for Job Creation, Quality of Life, Retail and Downtown Development, and Infrastructure Investments.

The overall goal of this element is to:

- Develop a strong and competitive economic base.
- Increase the average earnings per worker in the community and number of job opportunities in mid- to higher-wage rate areas.

- Provide adequate resources to ensure a high level of public services.

- Strike an appropriate balance between economic development efforts and maintaining the community's natural and manmade assets.

While the community must focus considerable energy and resources on attracting and promoting higher-paying industries, it must continue to attract retail, services, and tourist industries. It is these industries that currently provide the primary source of discretionary income for the City. Sales taxes in particular fund public-safety services, such as police and fire, as well as providing funds for community parks, planning, and other important and necessary services. Further, the medical industry has expanded significantly over the past two decades and continues to play a vital role in providing relatively high-wage, high-skill employment opportunities.

It is clear that attracting high-wage jobs will have a positive impact on the retail, services, and tourism industries. It will also lead to an increase in sales tax receipts for the City, since workers have more discretionary income to spend. However, the City also recognizes that additional strategies must be initiated to work in concert with industrial expansions.

AUTHORITY

In addition to the General Plan elements listed in Government Code Section 65302, local governments may adopt "any other elements or address any other subjects which . . . relate to the physical development of the county or city" (Government Code Section 65303). The Economic Development Element is an optional element that provides specific guidance on industrial, retail, and related development in the City.

GOALS AND POLICIES

BUSINESS ATTRACTION, EXPANSION, AND RETENTION

This section addresses efforts that the City will make in bringing additional primary industries, jobs, and other types of industry that demonstrate strong economic benefit to the city of Redding as well as protecting the job base that we currently have. The principal focus of the City's efforts should be on small- and medium-sized businesses which demonstrate a long-term commitment to the community. Accomplishment will require a focused effort on the part of numerous organizations, all working toward this common goal.

It should be noted that there are circumstances where it will be in the City's best interest to provide incentives to stimulate the local economy beyond that which would normally occur without public-sector involvement. Incentives are appropriate when the additional revenues or benefits received from a project are greater than the cost of the incentives provided by the City. In exceptional cases, the City may choose to participate financially in a project in the absence of a direct employment, revenue, or image-enhancement benefit. Direct City financial participation in a project should occur when the City's participation is key to the success of the development and the development directly fulfills an important community health, safety, and well-being goal. Examples may include a project that creates higher-paying jobs or a project that acts as a catalyst to bring other desirable projects into the City.

The Redding City Council has adopted numerous policies intended to facilitate economic growth. The following goals and policies are intended to complement and expand upon existing and future Council policies regarding economic development.

GOAL ED1

ATTRACT NEW PRIMARY AND OTHER INDUSTRIES WHICH ARE PROVEN TO PROVIDE HIGHER-PAYING JOBS AND MULTIPLIERS THAT WILL CREAT A MORE BALANCED AND STABLE ECONOMY.

Policies to achieve this goal are to:

ED1A. Maintain an inventory of developable industrial land free of significant development constraints in order to accommodate projected industrial growth over a 20-year time frame.

ED1B. Establish an economic development fund using a portion of proceeds from the sale of surplus property or other appropriate revenue sources to acquire/improve industrial sites, provide financial incentives, or to undertake other initiatives to accomplish the goals of this element.

ED1C. Facilitate the acquisition and development of one or more large industrial sites as a means of attracting appropriate industrial or distribution facilities.

ED1D. Continue to utilize the Shasta Metro Enterprise Zone, the job credit incentive program, and other economic incentives to attract primary and other industries to Redding.

ED1E. Work with the Economic Development Corporation, Shasta County, the Cities of Shasta Lake and Anderson, and other appropriate entities to market the area's opportunities to those industries with the highest potential of meeting economic and fiscal goals.

ED1F. Facilitate appropriate training for both existing jobs and in preparation for the needs of new employers by:

- Supporting practical job training and vocational programs geared to specific industries and occupational needs within the community.

- Continuing to encourage the development of a four-year university within the region.

- Attracting technical and business schools to the City.

ED1G. Pursue environmental mitigation strategies designed to remove impediments to industrial growth, including mitigation banks, habitat conservation plans, regional storm-water detention, and air quality programs.

ED1H. Facilitate establishment of air cargo and similar transportation- and aviation-oriented businesses at the Redding Municipal Airport through appropriate facility planning and expansions.

ED1I. Encourage and facilitate the establishment of a rail-side facility for freight-container loading/unloading in cooperation of the Union Pacific Railroad to augment rail transportation opportunities.

ED1J. Streamline the development and economic development process through code revisions and internal policies and project review efficiencies.

ED1K. Support public and private efforts to create viable incubator projects and other appropriate programs.

ED1L. Explore opportunities to leverage existing utility infrastructure to provide high-bandwidth telecommunication connections to properties in industrial areas.

GOAL **ED2** FACILITATE THE RETENTION AND EXPANSION OF EXISTING BUSINESSES.

Policies to achieve this goal are to:

ED2A. Identify and remedy any City impediments to the retention/expansion of existing businesses in Redding.

ED2B. Foster a better business climate by enhancing communication among the business community and City administration.

ED2C. Develop a Business Retention and Expansion Incentive Program for existing primary industries and other industries that provide higher-paying jobs and multipliers within the local economy.

GOAL **ED3** UTILIZE ECONOMIC INCENTIVES IN A COST-EFFECTIVE MANNER; ENSURE THAT THE USE OF INCENTIVE RESULTS IN SUBSTANTIAL BENEFITS TO THE RESIDENTS OF THE CITY.

Policies to achieve this goal are to:

ED3A. Utilize City-sponsored incentives for those businesses that demonstrate a long-term commitment to the community.

ED3B. Ensure that City-sponsored incentives provided will result in a net economic benefit for the City and its residents.

ED3C. Utilize incentives in a manner that maintains community standards and a sound financial base for infrastructure.

ED3D. Analyze proposed incentives from both fiscal and economic perspectives, including using a return on investment methodology.

ED3E. Leverage funds for City-sponsored incentives from a combination of sources such as redevelopment, Community Development Block Grant, and other programs where feasible.

COMMUNITY IMAGE

The image a community portrays is a vital component of economic development. Redding must continue to mature into a city that looks beyond providing basic needs for its citizens. It must also strive to become a community where excellence in civic, cultural, educational, and the natural environment are the norm.

The Community Development and Design Element addresses a number of actions and policies to accomplish this end. These include strong code enforcement efforts; provision of adequate infrastructure; and supplementation of plans for educational, cultural, and recreational opportunities, as well as other measures.

GOAL **ED4**

PRESERVE AND ENHANCE THE COMMUNITY ASSETS AND CHARACTER WHICH MAKE THE COMMUNITY AN ATTRACTIVE AREA TO LIVE, WORK, AND INVEST.

Policies to achieve this goal are to:

ED4A. Develop and implement plans for enhancement of educational, cultural, and recreational facilities for the City that attract visitors and improve the quality of life for residents, such as:

- Developing a sports complex.
- Completing the Turtle Bay Museum Complex and Sacramento River pedestrian bridge.
- Developing the Park Marina riverfront area.
- Adding to the existing and proposed trails network
- Expanding existing and adding new community parks.
- Integrating public art into the life of the community.
- Providing a full-service library.
- Facilitating community events, such as MarketFest, Kool April Nites, Redding Jazz Festival, and similar events.

ED4B. Develop multi-use, public-assembly facilities in support of the conventions and hospitality industry and as a means of enhancing the cultural level of the community and the quality of life.

RETAIL AND SERVICE INDUSTRIES

A large portion of the City's revenue is derived from the retail industry. It is this revenue which enables the City to provide a variety of necessary public services such as police and fire protection, parks, and other services. The regional nature of Redding's retail market (approximately 27,000 square miles) significantly enhances the ability of the City to provide public services at a level that surpasses many similarly sized cities because of the considerable sales tax that is captured.

The community need not rely solely on the trade area noted above for the health of the retail and service sectors. A tremendous opportunity exists for attracting conventions that bring additional dollars to the community from outside this area. The natural recreational amenities offered by this region, together with an impressive variety of lodging and eating establishments, clearly suggest that the potential for an increase in convention activity is untapped.

GOAL **ED5**

MAINTAIN AND EXPAND REDDING'S INFLUENCE AS A REGIONAL RETAIL TRADE CENTER.

Policies to achieve this goal are to:

ED5A. Pursue development of a new convention center and conference facilities in order to remain competitive in the convention industry.

ED5B. Encourage proposals for major shopping, specialty retail, cultural, entertainment, tourism, and convention facilities that are regional in scope and which will strengthen Redding's position as the North State hub for these activities.

ED5C. Consider providing financial incentives for regional retail developments where retail sales leakage will be reduced. Establish return-on-investment criteria for public funds.

ED5D. Support efforts to increase the number of businesses operating in Redding to generate more sales tax, transient occupancy tax, and business and personal property taxes.

ED5E. Aggressively promote the City to the visitor and convention markets.

ED5F. Support efforts directed at capturing sales taxes from Internet and catalog sales.

ED5G. Support efforts to expand medical facilities and services in the community.

DOWNTOWN REVITALIZATION

A vibrant downtown says much about a community. It is a place where businesses thrive and cultural events and entertainment opportunities abound. It is a setting that provides a true heart to a community and expresses the community's basic values. A strong downtown conveys a positive message to prospective businesses about the community's pride and concern.

GOAL **ED6**

ESTABLISH THE DOWNTOWN AREA AS A VIBRANT, HEALTHY CITY CORE THAT SERVES AS THE CITY'S SOCIAL, CULTURAL, AND SPECIALTY RETAIL CENTER.

Policies to achieve this goal are to:

ED6A. Facilitate the revitalization and redevelopment of the Downtown Redding core.

ED6B. Preserve and enhance historic structures that contribute to the unique character of Downtown and add to the Downtown pedestrian retail attraction.

ED6C. Explore the feasibility of assuming responsibility for portions of the State highway system in Downtown.

ED6D. Facilitate additional attractions and amenities that bring people Downtown, including restaurants, local shopping, festivals/special events, and entertainment.

ED6E. Encourage retail diversity, including the establishment of small specialty retail shops in the Downtown and Park Marina Drive areas.

ED6F. Facilitate and promote the expansion of cultural and entertainment opportunities Downtown that will attract retail customers during nonpeak hours.

ED6G. Encourage Shasta College, Simpson College, Chico State University, and other institutions to conduct evening classes Downtown to expand retailing opportunities into the evening hours.

Public Facilities and Services Element

Public Facilities and Services Element

INTRODUCTION

PURPOSE AND CONTENT

Capital improvements are perhaps the most important investment a City can make in itself. They are also the most expensive. Therefore, it is essential that decision-makers and the public have access to information regarding anticipated facility needs and desired service level standards to ensure that necessary improvements are constructed at the appropriate time. This element contains facility descriptions, service level standards, and goals and policies designed to assist the City Council, advisory bodies and the city management team with decisions related to staffing and the construction/improvement of public facilities.

The location, size and timing of needed improvements is directly related to the land use patterns identified in the Community Development and Design Element and service level standards identified within the Public Facilities and Services Element. Significant changes in land use types, locations or intensities from those identified within the Community Development and Design Element can have a direct impact on public facility and services planning. When changes to the Community Development and Design Element and/or General Plan Diagram are considered, the impacts on planned public facilities should also be assessed and considered as part of the land use change decision-making process.

The biggest challenge Redding faces in providing public facilities and services is developing a long-term funding strategy to pay for those items without creating an undue burden on itself, developers, City residents and businesses. The second half of this element includes a discussion of funding options for identified facilities and services and policy guidelines for long-term funding strategies.

Background data and information for this element is contained within Chapters 5 and 7 of the City of Redding *General Plan Background Report*, although some of that information has been updated to reflect more current conditions. This report describes the full range of facilities and services provided to the citizens of Redding by the City and other agencies. That information is not repeated in this element.

Specific topics addressed in the Policy Document include:

- Law Enforcement
- Fire Protection
- Municipal Water Systems
- Sanitary Sewer Collection and Treatment
- Electric Service
- Solid Waste Collection and Disposal
- Storm Drain Facilities
- Corporation Yard
- Streets
- Bridges
- Transit Facilities
- Airport Facilities
- Parks
- Large and Small Community Centers
- Convention Facilities
- Downtown Improvements
- Libraries
- Funding

Discussion of these topics and the issues related to providing public facilities and services as a whole has been grouped within the following Sections:

- Establishing and Maintaining Service Levels
- Public Safety (Law Enforcement and Fire Protection)
- Utility Infrastructure and Services (Water, Sewer, Electric, Solid Waste, Stormwater, and Corporation Yard)
- Transportation Facilities (Streets, Bridges, Transit Facilities, and Airports

- Recreational and Cultural Facilities (Parks, Large and Small Community Centers, Downtown Improvements, Convention Center, and Libraries)

- Funding

AUTHORITY

Pursuant to Section 65303 of the Government Code, a General Plan may include optional elements such as a Public Facilities Element, as long as the element relates to the physical development of the City. These elements have the same legal status and consistency requirements as mandatory elements.

GOALS AND POLICIES

ESTABLISHING AND MAINTAINING SERVICE LEVELS

The types and levels of public facilities and services that are provided in a community often affects not only an individual's thoughts about the quality of life that the community offers, but can have a direct impact on economic development efforts. Cities which maintain higher levels of services and facilities typically foster a good deal of civic pride among their residents, and leave a positive impression with those who visit. As Redding continues to evolve into a regional urban center, it is essential that existing service and facility standards be maintained and/or improved. Strategies should also be implemented which ensure that desired facilities and services are provided in the most efficient and cost effective manner possible. The facility and service thresholds that follow are intended to guide planning and funding decisions, but not to be proscriptive in nature.

GOAL **PF1**

ENSURE THAT ADEQUATE PUBLIC SERVICES AND FACILITIES ARE AVAILABLE TO SUPPORT DEVELOPMENT IN AN EFFICIENT AND ORDERLY MANNER.

Policies to achieve this goal are to:

PF1A. Require that all new development, including major modifications to existing development, construct necessary on-site infrastructure to serve the project in accordance with City standards.

PF1B. Require that all new development, including major modifications to existing development, construct or provide a fair share contribution toward the construction of any off-site improvements necessary to offset project impacts and/or support the project.

PF1C. When reviewing applications for land use designation changes (i.e. zone change, General Plan Amendment, Specific Plan), conduct a thorough analysis of the impacts of the proposed changes on all aspects of the City's infrastructure system, and require mitigation as appropriate.

PF1D. Require that the provision of streets, sewer, electric, water, drainage and other needed infrastructure be coordinated in a logical manner between adjacent developments so as to reduce design, construction and maintenance costs.

PF1E. Require that infrastructure be designed and constructed to meet ultimate capacity needs, pursuant to a master plan, so as to avoid the need for costly retrofitting.

PF1F. Utilize reimbursement agreements, where appropriate, when upgraded or oversized facilities are installed by an individual developer and the cost of the facilities exceeds the development's proportional share of responsibility.

PF1G. Direct growth toward areas which already have infrastructure capacity available by providing incentives for quality infill development.

PF1H. Encourage clustering of development to maximize the use and efficiency of infrastructure facilities.

PF1I. Regularly update and adopt the City's Capital Improvement Program (CIP) to prioritize funding for public works projects in accordance with the General Plan.

PF1J. Recognize the considerable public investment made in existing utility and street infrastructure by ensuring that funding for maintaining its integrity, reliability, and service levels is on par with investment in new facilities.

PUBLIC SAFETY

Providing public safety services is an important function of any municipality. Safety services are

typically divided into two broad categories: law enforcement and fire protection.

LAW ENFORCEMENT

Law enforcement in the Planning Area is provided by two agencies, the Redding Police Department and the Shasta County Sheriff's Department. The Redding Police Department provides law enforcement services within the City limits. The Shasta County Sheriff's Department is responsible for services within the unincorporated areas.

The Redding Police Department operates primarily from the main station complex located at 1313 California Street and a satellite investigations office in the Downtown Mall. The department is organized into three major divisions: Administrative Services, Field Operations and Investigations.

In 1999, the City employed 107 sworn officers, giving it a ratio of 1.36 officers per 1,000 residents. This figure is considered average and the minimum amount necessary to sustain current levels of service. In order to improve efficiencies, consolidation of all divisions in one location, which will allow for future increases in staffing, is desirable. However, even with the conversion of the existing Council Chambers at the main station complex and extensive remodeling, a new facility is needed today, but funds are not available for its construction.

Other issues for consideration include the need for additional Field Operations stations as development within the Planning Area continues toward buildout. Colocation of additional police Field Operations facilities with City Fire Stations may provide opportunities to maximize facility investment and efficiencies. Other options for increasing the presence and accessibility of law enforcement personnel may include developing community-oriented substations in certain areas.

Response Time

The Redding Police Department has established a geographic based "beat" system to respond to calls for service. There are currently six beats covering the City's 59 square mile area. Department personnel have expressed concerns with the size of the existing beats (particularly Beat 1—the largest geographically) in the City. Annexation of additional areas is also an ongoing concern, particularly depending on the size and location of the annexation. Significant increases in population or geographic area are likely to result in the need for additional beats and/or staffing. Otherwise, degradation of existing response times would almost certainly occur.

GOAL PF2 — **ENSURE A HIGH LEVEL OF POLICE PROTECTION FOR THE CITY'S RESIDENTS, BUSINESSES, AND VISITORS.**

Policies to achieve this goal are to:

PF2A. Establish the following thresholds for police services:

- Maintain, at a minimum, a sworn officer to population ratio of 1.36 officers per 1,000 residents.
- Respond to 85 percent of Priority 1 calls within 5 minutes of being dispatched.

PF2B. Provide police facilities (including patrol and other vehicles, necessary equipment, and support personnel) sufficient to maintain the City's standards for law enforcement services.

PF2C. Consider the desirability of establishing police substations in certain areas.

PF2D. Consider utilizing developer impact fees to finance a portion of police facilities.

GOAL PF3 — **CREATE AND MAINTAIN EFFICIENT POLICE ADMINISTRATION FACILITIES.**

Policies to achieve this goal are to:

PF3A. Remodel the "old" City Council Chambers to provide additional floor area in Fiscal Year (FY) 2000-2001.

PF3B. Construct a new 48,000-square-foot police administration building to

consolidate services at the new Civic Center complex.

FIRE PROTECTION

Fire protection within the Planning Area is provided by three primary agencies. These include the Redding Fire Department (RFD), California Department of Forestry and Fire Protection (CDF) and the Shasta County Fire Department (SCFD). The Redding Fire Department has the primary responsibility for providing fire protection and emergency services response within the City limits. A mutual aid agreement is in effect with CDF during the wildland fire season for wildland and structure fires within a one mile fringe area surrounding the City. An automatic aid agreement with the Shasta County Fire Department is also in effect for structure fires outside of the wildland fire season. Under this agreement the Redding Fire Department responds within a one mile fringe area surrounding the City and to county islands. Shasta County Fire Department responds to a small geographic area on the east side of the City.

The Redding Fire Department has three main divisions: Administration, Operations, and Fire Prevention. It operates from seven stations and a Fire Headquarters at City Hall.

Response Time / ISO Rating

The Redding Fire Department has a standard of a five-minute response time for all emergency calls, although a four-minute response is more desirable for life safety and property conservation. Response time is measured from the point at which the agency receives notification from the Shasta Area Communications Agency (SHASCOM), which provides a consolidated dispatch service. The Department notes annexation activity and population growth have resulted in the standard not being met in all seven districts. Average response times in 1998/1999 ranged from a low of 5.67 minutes for the response area served by Station 1 (1335 Shasta Street) to a high of 7.11 minutes for the response area served by Station 6 (4201 Oasis Road).

The City currently maintains an Insurance Services Office (ISO) rating of 3. However, the Fire Department has expressed concern over the ability to maintain this rating as areas are annexed and additional growth occurs in the existing City limits. To offset the potential for a reduction in ISO rating, additional fire stations and built in fire protection systems will be necessary as the boundaries of the City expand.

GOAL PF4 — ENSURE ADEQUATE FIRE PROTECTION AND EMERGENCY MEDICAL RESPONSE FOR RESIDENTS AND BUSINESSES IN THE COMMUNITY.

Policies to achieve this goal are to:

PF4A. Establish the following thresholds for fire protection services:

- Maintain a community ISO rating of 3 or better.
- Respond to 90 percent of all calls within 5 minutes of being dispatched.

PF4B. Endeavor to maintain the minimum response time for fire calls through adequate staffing, proper distribution of fire stations and equipment, and use of automatic aid agreements.

PF4C. Construct new and possibly relocate existing fire stations as needed to maintain service thresholds.

PF4D. Utilize the following factors to determine the location and type of fire fighting equipment that is needed:

- The concentration of structures in a given area.
- The available water supply.
- The availability of automatic aid.
- The amount of area to be protected.
- The kind of fires to be encountered.
- Desired response times.

PF4E. Implement ordinances to protect life, control fire losses and fire protection costs through the use of automatic suppression systems.

UTILITY INFRASTRUCTURE AND SERVICES

Urban development requires a wide range of utility services including water, sewer, solid waste, electric, and stormwater drainage. The City has historically provided all of these services within its incorporated area except for independent water districts operated in various areas. Special districts and private utility companies provide these services within the unincorporated portions of the Redding Planning Area.

MUNICIPAL WATER SYSTEMS

As of 1999, water service within the Planning Area is provided by five different entities: The City of Redding, Bella Vista Water District, Centerville Community Services District, Shasta Community Services District and the Clear Creek Community Services District. Coordination between the City and the various districts is generally provided by "annexation agreements" which ensure that water systems and fire flows are constructed and maintained in accordance with City of Redding Standards.

The City has three primary sources of water to supply its municipal water system:

1. Surface water drawn from the Sacramento River. This source constitutes approximately 59 percent of the City's total supply.

2. Surface water drawn from Whiskeytown Lake via the Spring Creek Conduit. This source constitutes approximately 18 percent of the City's total supply.

3. Wells located in the Enterprise area provide approximately 18 percent of the City's total supply. Wells located in the Cascade system located in south central Redding provide approximately 5 percent of the City's total supply.

Options for meeting anticipated water demand associated with buildout of the General Plan include:

1. Drilling additional wells.

2. Obtaining increased surface water allotments from the U.S. Bureau of Reclamation.

3. Conservation measures.

4. Transfer agreements with other agencies.

5. Treatment and utilization of reclaimed water.

6. Development and implementation of policies which require new development to install landscape with low water requirements.

GOAL **PF5** MAINTAIN AN ADEQUATE LEVEL OF SERVICE IN THE CITY'S WATER SYSTEM TO MEET EXISTING AND FUTURE NEEDS.

Policies to achieve this goal are to:

PF5A. Establish the following thresholds for water services and facilities:

- Program planned expansion activities, when demand at an existing treatment plant reaches within 10 percent plant capacity.
- Reservoir capacity should be maintained at 20 percent of maximum day demand.
- Develop additional water supplies from wells at least two years prior to a projected water deficit.

PF5B. Develop and maintain a regular program for systematically replacing deteriorated or deficient water pipes.

PF5C. Require water distribution systems to be interconnected ("looped") wherever feasible to facilitate the reliable delivery of water anywhere in the City.

PF5D. Immediately begin the process to acquire additional allocations from the U.S. Bureau of Reclamation.

PF5E. Be actively involved in surface water adjudication which could have a negative impact on the City's water rights and/or allocation.

PF5F. Periodically update the City's Master Water Plan to reflect changes to the General Plan General Plan Diagram, water use pattern changes, regulatory changes, or other circumstances.

SANITARY SEWER COLLECTION AND TREATMENT

The City of Redding is the sole provider of sanitary sewer service within the Planning Area. However, current policy dictates that except under extraordinary circumstances, sewer service will not be extended unless properties are first annexed to the City. The Planning Area is divided into two separate service areas known as the Clear Creek Sewer Service Area and the Stillwater Sewer Service Area.

As of 1999, there were 34,020 HE's within the system. This is 37 percent of the 92,045 HE's estimated for ultimate development of the service area. With proposed future expansions, and correction of current inflow and infiltration difficulties, the two treatment facilities will be able to accommodate the forecasted growth.

GOAL **PF6**

MAINTAIN AN ADEQUATE LEVEL OF SERVICE IN THE CITY'S SEWAGE COLLECTION AND TREATMENT SYSTEM TO MEET EXISTING AND FUTURE NEEDS.

Policies to achieve this goal are to:

PF6A. Establish the following thresholds for sewer facilities:

- Program planned expansion activities when a trunk line, interceptor line, or lift station reaches 75 percent of capacity.
- Program planned expansion activities, when an existing wastewater treatment plant reaches 75 percent capacity based on dry weather flows on an ongoing basis.

PF6B. Monitor operation of the sewage collection and treatment system to determine when upgrading or expansion of the system is necessary to serve development demands.

PF6C. Develop and implement a regular program for replacing and upgrading deteriorated and undersized sewer lines to reduce inflow and infiltration into the system.

PF6D. Encourage the land application of treated wastewater biosolids and other similar activities consistent with standard industry practices and permitting by the California Regional Water Quality Control Board and the Planning Commission.

PF6E. Develop a market and the ability to deliver reclaimed water for appropriate uses.

ELECTRIC SERVICE

As a California municipal corporation, the City of Redding owns, operates and maintains a power transmission and distribution system within the City limits. Given the investment in such a system, and a commitment to providing power at the lowest possible rates, it has historically been Redding's policy to be the sole provider of electric service within the City limits. As areas are annexed, City electric service is made available when PG&E facilities can be purchased or otherwise provided through a logical extension of the City's electric distribution system.

On September 23, 1996, the Governor of California signed into law the landmark electric utility industry restructuring legislation known as AB 1890. Industry restructuring or deregulation is an effort by the State to lower consumers' energy costs by providing competition in the buying and selling of energy. Deregulation only applies to the generation of energy; it does not apply to the distribution of energy.

As industry restructuring unfolds, the City Electric Utility is committed to be the preferred provider of electric service within the City limits.

To remain competitive and to serve present and future demands for electric service, the City will expand the electric system in a logical manner to reliably deliver energy to its customers and will acquire new energy resources as needed to meet customer energy needs.

GOAL **PF7**

PROVIDE SAFE, RELIABLE, COMPETITIVELY PRICED ELECTRICITY FOR EXISTING AND FUTURE CITY ELECTRIC CUSTOMERS.

Policies to achieve this goal are to:

PF7A. Periodically review and update , as necessary, the City's Electric Utility Strategic Plan to reflect industry restructuring developments and other changing conditions.

PF7B. Continue to budget capital expenditures for buildout of the electric system. Periodically update the system plan to reflect changes in electric usage patterns, regulatory changes, changes in General Plan land use and other circumstances.

PF7C. Require main electric distribution lines to be interconnected (looped) wherever feasible to facilitate the reliable delivery of electricity within the City.

PF7D. Design the electric system to allow service to be provided to all electric customers in the event of a single contingency failure of a City 115kV power line, substation transformer or main 12kV feeder line (other than the failed section).

PF7E. Regularly inspect overhead and underground electric facilities and continue established programs for systematically maintaining and replacing older electric facilities. Maximize opportunities for undergrounding 12kV distribution lines.

PF7F. Develop a diverse energy or power supply mix that is competitive with the California market and is environmentally sensitive.

SOLID WASTE COLLECTION AND DISPOSAL

Solid waste generated in the Planning Area is disposed of at Shasta County's Richard W. Curry/West Central Sanitary Landfill. Under existing state permits, the landfill has sufficient capacity to accommodate the disposal of solid waste at least to the year 2017. Expansion of the facility also appears to be plausible at such time as increased capacity is warranted beyond the extent of existing permits.

Although Shasta County owns the Richard Curry Landfill, it has contracted with the City of Redding for the operation and management of the facility. This arrangement was formalized in 1988. All residential, commercial and industrial refuse in Redding is collected by City personnel. The Anderson-Cottonwood Disposal Service provides refuse service to those portions of the Planning Area outside the City limits. The City takes over refuse collection and disposal responsibilities, as areas are annexed.

Since 1995, the City has operated it own Solid Waste Transfer Station for the transfer of City-collected residential, commercial, and industrial refuse and the transfer of self-haul public refuse. The facility also has the capability of processing materials collected by curbside recycling programs and contains a household hazardous waste drop-off/processing area, and a composting area.

Recycling efforts within the City currently focus on the collection of residential, curbside recyclables and green waste, community education, and operation of a voluntary drop-off facility at the Solid Waste Transfer/Recycling Facility. Commercial recycling programs include the collection of corrugated cardboard, bar glass, office paper, newspaper, plastic containers, and the diversion of wood and metal wastes. The Solid Waste Utility is conducting audits of businesses' wastes to identify and divert potential recyclables from the waste stream.

Future recycling programs will include automated collection of green waste and recyclables, which could increase customer participation and waste diversion

rates. With the implementation of automated collection of recyclables, the Utility may begin collecting additional recyclables, such as waste paper, junk mail, and additional plastics (Types #3 and #7).

GOAL

PF8

PROVIDE FOR EFFICIENT COLLECTION AND DISPOSAL OF SOLID WASTE WHILE MAINTAINING AN ADEQUATE WASTE DISPOSAL CAPACITY.

Policies to achieve this goal are to:

PF8A. Establish the following thresholds for solid waste collection and disposal facilities:

- Prepare necessary studies and obtain appropriate permits to operate a sanitary landfill in Southwest Oregon Gulch or another appropriate site 5 years preceding the closure of the Richard Curry Landfill.
- Pursue expansion of the City's solid waste transfer station when collection activities approach 85 percent of facility capacity or additional space is needed to accommodate desired separation and recycling activities.

PF8B. Continue to require solid waste collection service for residential, commercial and industrial uses within the incorporated area.

PF8C. Continue to implement the City's Source Reduction and Recycling Element and expand identified programs, when feasible, in order to meet or exceed state mandated waste diversion goals.

PF8D. Promote recycling and other measures designed to reduce the generation of solid waste.

PF8E. Continue to work cooperatively with Shasta County to address regional issues related to solid waste disposal and waste reduction.

STORMWATER FACILITIES

The Redding Planning Area contains fifteen hydrologic basins. Storm drainage facilities within the City limits are operated and maintained by the City. Adjacent to incorporated cities, the responsibility resides with the County of Shasta. As new areas are annexed, the City assumes responsibility for stormwater management.

Existing storm drainage facilities consist of conventional drop inlet/storm drainage pipeline collection and conveyance systems located throughout the City. These systems typically outfall into natural ravines or tributaries to the Sacramento River where the water is ultimately discharged. Recent studies have indicated that a regional detention/retention approach to stormwater management may be the most effective strategy to accomplish adequate flood protection within the Planning Area.

GOAL

PF9

AVOID INCREASES IN EXISTING 100-YEAR FLOOD LEVELS.

Policies to achieve this goal are to:

PF9A. Establish the following thresholds for stormwater drainage facilities:

- Design drainage facilities to convey a 100-year storm.
- Until adequate regional stormwater facilities are in place, utilize a policy of "no net increase in runoff" for development projects in all drainage basins where existing development is within the 100-year floodplain.

PF9B. Select and pursue the acquisition of sites considered appropriate for regional stormwater detention /retention facilities within the incorporated area.

PF9C. Construct regional stormwater detention/retention basins at locations that will minimize current flooding risk.

PF9D. Encourage Shasta County and the City of Shasta Lake to participate in the City's regional systems and/or develop a system of regional detention facilities that will complement the City's system.

PF9E. Encourage project designs that minimize drainage concentrations and coverage by impermeable surfaces.

PF9F. Maintain all drainage facilities, including detention basins and both natural and manmade channels, to ensure that their full carrying capacity is not impaired.

CORPORATION YARD

An often overlooked component of providing a variety of services is the space needed to accommodate and service the vehicles, equipment, and supplies that are utilized by various City Departments. The City's corporation yard currently houses the following types of operations:

- Public Works Field Operations (water, wastewater, streets, electricity)
- Parks maintenance.
- Fleet maintenance.
- Building maintenance.

As the City continues to grow, it must ensure that its corporation yard is adequately sized and configured to accommodate the storage, repair, and operational needs of the City.

GOAL **PF10**

ENSURE THAT FACILITIES ARE PROVIDED TO ACCOMMODATE THE CITY'S STORAGE, REPAIR AND OPERATIONAL NEEDS.

Policies to achieve this goal are to:

PF10A. Prepare a strategic improvement plan for the corporation yard to address long-term needs including, but not limited to: ultimate land area, types of buildings and structures, indoor and outdoor material storage, screening, office space, and access and storage for vehicles and equipment.

TRANSPORTATION FACILITIES

There are a number of modes of transportation which are utilized within a community. These include, but are not limited to: vehicular, air, transit, rail, bicycle, and pedestrian. Of these items, the most extensive and costly facilities that are provided and maintained by the City are: streets, bridges, airports, and transit facilities.

Rail service, which is provided by private companies, as well as those features designed to accommodate bicycle, pedestrian and equestrian modes are addressed as appropriate within the Transportation and Recreation Elements. Streets and highways, airports, and transit services are also addressed in the Transportation Element.

STREETS

The City is responsible for ensuring the construction and maintenance of all public streets, sidewalks, bridges, bikeways, traffic signals and street signage within the incorporated City Limits. The City also maintains a variety of Caltrans facilities consistent with the terms of various cooperative agreements. Developers are either partially or totally responsible for new street construction depending on the type and location of the project. The City uses public funds to build or improve major streets when past development did not make these improvements as part of their projects.

GOAL **PF11**

MAINTAIN, AND EXPAND WHEN NECESSARY, A STREET SYSTEM THAT ALLOWS ALL USERS TO TRAVEL SMOOTHLY AND SAFELY.

Policies to achieve this goal are to:

PF11A. Establish the following thresholds for streets and intersections:

- Maintain a Level of Service "C" on all City roadways and intersections,

except at those locations identified within the Transportation Element, where a LOS "D" is appropriate.

- Major arterials and intersections should be programmed for ultimate lane improvements five years in advance of projections showing LOS declines below adopted standards.

PF11B. Establish a program and funding mechanism to complete portions of arterials that were not constructed to ultimate lane widths in conjunction with adjacent development and now create irregular links or capacity constraints within the system.

PF11C. Reconstruct existing streets as appropriate to comply with current design standards, when funding becomes available. Such improvements may include, but are not limited to: paving, curbs, gutters, sidewalks, signage, landscaping, lighting, raised medians, bikeways and bus pullouts.

PF11D. Establish a program to conduct periodic street maintenance activities such as slurry seals, overlays, and pavement reconstruction to optimize public expenditures and level of service.

PF11E. Develop a program to establish street "plan lines" for future street extensions noted in the Transportation Element.

BRIDGES AND OVERCROSSINGS

The City of Redding is fortunate to have natural features, such as the Sacramento River and its tributaries, traverse through its Planning Area. However, these features, as well as manmade features such as Interstate 5 and the Union Pacific Railroad can also create barriers to vehicular and pedestrian travel. As Redding develops, it will need to consider and pursue improvements to existing and future bridge/overcrossing facilities if desired access to growth areas and roadway Level of Service standards are to be achieved and maintained.

GOAL **PF12**

ENSURE THAT BRIDGE AND OVERCROSSING IMPROVEMENTS WHICH ARE ESSENTIAL TO THE CITY'S CIRCULATION PLAN ARE PROVIDED.

Policies to achieve this goal are to:

PF12A. Establish the following thresholds for bridges and overcrossings:

- Pursue funding for bridge and overcrossing improvements ten years in advance of projections showing LOS declines below adopted roadway and intersection standards.

- Establish plan lines and begin any necessary right-of-way- acquisition ten years in advance of the anticipated construction of new bridge and overcrossing facilities identified within the City's Circulation Plan.

PF12B. Identify appropriate locations for grade separations at railroad crossings and pursue their construction.

PF12C. Consider the location of future bridge and overcrossing improvements when development is proposed near those areas to ensure that opportunities to construct the facilities will not be precluded in the future.

TRANSIT FACILITIES

Public transportation in the Redding area is provided by the Redding Area Bus Authority (RABA), which operates both fixed route and demand response transit services. The fixed route service consists of 13 routes with individual stops at quarter-mile increments. The demand response service provides curb-to-curb transportation for individuals who, because of a mobility impairment or other limitations, are not able to use a standard fixed route system.

RABA began providing service in 1981 and through route extensions, fleet acquisition and facility

upgrades, continues to meet the challenges of an expanding urban center.

One of the most significant improvements completed in recent years is Phase I of RABA's new intermodal passenger transfer facility which was constructed in Downtown Redding on the north side of Yuba Street adjacent to the Union Pacific Railroad Tracks.

Construction of Phase II is intended to consolidate regional and interstate bus lines and passenger rail service with the RABA system at a single location. The proposed facility would create a more convenient link between rail and commercial bus or public transit services.

GOAL **PF13**

PROVIDE AN EFFICIENT AND RELIABLE PUBLIC TRANSIT SYSTEM THAT SERVES ALL SECTORS OF THE COMMUNITY.

Policies to achieve this goal are to:

PF13A. Establish the following threshold for transit related facilities:

- Work to balance required fare box ratios with the desire to reduce headways on principal routes to one-half hour to encourage ridership.

PF13B. Complete all planned phases of the City's central intermodal transfer facility. Encourage relocation of the existing Greyhound Terminal to the RABA site.

PF13C. Establish secondary transfer facilities at strategic locations throughout the City.

PF13D. Pursue the establishment of Park-n-Ride facilities as appropriate throughout the community. These activities may include delineation of such facilities within under-utilized parking lots.

PF13E. Consider utilizing impact fees to finance transit facilities and services.

AIRPORT FACILITIES

There are two airports located within the Planning Area. The Redding Municipal Airport, located in the southeast portion of the City, is designated as a certified airport for commercial airline operations. Benton Airpark, located close to Downtown Redding at Placer Street and Airpark Drive, is a general aviation airport which provides commercial reliever support to the Redding Municipal Airport. Both facilities are owned and operated by the City of Redding. The availability of convenient air transportation for residents and businesses is an asset to the community and can be used as a marketing tool in the City's economic development efforts.

The 1995 Airport Master Plan outlines future improvements planned for the Redding Municipal Airport and Benton Airpark. In addition to a listing of proposed improvement projects, the Master Plan identifies estimated costs and general time frames (short-term, long-term, etc.) for installation of the improvements.

GOAL **PF14**

PROVIDE CONVENIENT AIRPORT SERVICES FOR THE COMMUNITY WITH MINIMAL ADVERSE IMPACTS.

Policies to achieve this goal are to:

PF14A. Implement the Airport Master Plan and Comprehensive Land Use Plans adopted for the Redding Municipal Airport and Benton Airpark. Periodically update these documents as appropriate.

PF14B. Continue to upgrade passenger aviation facilities, as funding becomes available, and pursue expansion of passenger aviation services.

PF14C. Identify and pursue the acquisition of additional land area determined necessary for the protection of existing airport operations or anticipated future expansion of airport facilities.

PF14D. Develop strategies to generate ongoing funding for general airport operations and a reserve which can be used to meet the matching fund requirements of grant funding sources.

RECREATIONAL AND CULTURAL FACILITIES

Recreation facilities consisting of public parks and special use facilities, as well as cultural amenities such as a civic auditoriums and libraries, are essential features which contribute to the overall quality of life within a community. The City of Redding and other public/private groups and individuals have made a commitment to providing and enhancing the quality and availability of these facilities to meet the needs of City's residents and attract visitors to the region.

PARKS

Redding's parks and improved open space areas are one of the most visible and valued public amenities provided by the City. Due to the importance of park and recreation facilities, Redding's General Plan contains a Recreation Element to specifically address those facilities and programs. The Element identifies various types of parks and parkland, as well as suggested sizes for specific park types. The recommended acreage of parkland per 1,000 population is 10 acres. The Element also suggests that at least one Community Park, 40 acres in size or greater, be provided in each quadrant of the City. In order to maximize efficiencies and reduce maintenance costs, it is recommended that parks be collocated with schools whenever possible. Strategies which encourage private sector development of park facilities and improved open space are also included.

GOAL **PF15**

MAINTAIN A PUBLIC PARK AND RECREATION SYSTEM SUITED TO THE NEEDS OF REDDING RESIDENTS AND VISITORS.

Policies to achieve this goal are to:

PF15A. Establish the following threshold for park facilities:

- Program park development to attain and maintain a ratio of 10 acres of developed parkland for each 1,000 residents of the City as defined in the Recreation Element.

PF15B. Work with developers to provide public and private parks and open space (as appropriate) in new neighborhoods.

PF15C. Program the development of a regional sports complex as the next "community park" facility to be constructed.

PF15D. Pursue renovation of "The Plunge" and reestablish use of the facility as a community swimming pool.

PF15E. Develop a funding mechanism to cover the cost of maintaining future parks and recreational facilities on an on-going basis.

LARGE AND SMALL COMMUNITY CENTERS

Another important component of the quality of life in a community is provided by indoor recreation facilities such as large and small community centers. These facilities can be designed to provide recreational opportunities for specific segments of the community such as teens or seniors. They can also function as multi-purpose centers with very diverse users. These facilities may be "stand alone", but are often constructed within a community park facility.

GOAL **PF16**

PROVIDE COMMUNITY CENTERS THROUGHOUT THE COMMUNITY TO MEET THE INDOOR RECREATION NEEDS OF A VARIETY OF USERS.

Policies to achieve this goal are to:

PF16A. Distribute community center development equitably throughout the City based upon population densities and the demographic characteristics of the majority of nearby residents (i.e., families, the elderly, etc.) in the anticipated service area.

REDDING CONVENTION CENTER

The Redding Convention Center is a multipurpose building situated in a park-like setting near the Sacramento River just off Highway 299 West. The 39,000 square foot multi-level building is designed to serve as an auditorium, convention center and exhibit hall. Moveable walls and seating are used throughout to provide adaptability to a variety of uses. The Redding Convention and Visitors Bureau was established in 1977 to help bolster the convention business for the City and increase its popularity as a tourist "destination." As a result, Redding is now a major competitor in the West Coast convention market, competing with cities such as Sacramento, Fresno, Stockton, Bakersfield, Riverside, Anaheim, Concord and Santa Rosa.

A 1997 study completed by Coopers & Lybrand has indicated that in comparison to its primary competitors, the Redding Convention Center ranks relatively low in terms of dedicated and total exhibit/multi-purpose meeting and banquet space. Based on a survey of regional and state association meeting planners and local organization representatives, it is estimated that if additional space recommendations are implemented, average annual event levels could increase from 21 to 34 events. Locating expanded facilities closer to existing hotel/motel accommodations in the Hilltop Drive area where infrastructure is already in place and access to overnight lodging facilities is improved, could be a preferred option to expanding the existing Convention Center or developing a new undeveloped site.

GOAL **PF17**

ENSURE THAT CONVENTION CENTER FACILITIES CONTINUE TO MEET THE NEEDS OF REDDING RESIDENTS AND VISITORS.

Policies to achieve this goal are to:

PF17A. Continue to explore on-site and off-site options for expansion of convention center facilities.

PF17B. Identify a variety of sites that could accommodate proposed facility development and pursue negotiations with landowners.

PF17C. If a viable site is identified and preliminary negotiations with landowners are successful, pursue funding and development of new off-site convention facilities.

PF17D. If construction of off-site convention facilities is determined infeasible, pursue funding for the expansion and upgrading of existing convention center facilities to ensure that Redding remains a major competitor within the West Coast market.

DOWNTOWN IMPROVEMENTS

Downtown Redding has historically been the commercial and cultural core of the City. Although the prominence of Downtown as a retail center declined after Interstate 5 was constructed and new shopping center development occurred in other portions of the City, it is important that investment in Downtown Redding continue to support its visual and functional role as the cultural heart of the community. Downtown Redding has a distinct character which can be perpetuated and enhanced through a number of mechanisms. In order to be successful, unique features such as a large public gathering space, streetscape and pedestrian amenities, and public parking facilities need to be provided.

GOAL **PF18**

PROVIDE FACILITIES AND AMENITIES THAT ENHANCE THE UNIQUE CHARACTER OF DOWNTOWN REDDING AND SUPPORT ITS ROLE AS THE HEART OF THE COMMUNITY.

Policies to achieve this goal are to:

PF18A. Establish the following thresholds for Downtown facilities:

- Program the development of a public parking structure(s) in Downtown Redding when existing on-street and off-street parking facilities reach 85 percent of capacity during regular business hours (8AM to 5PM) on an ongoing basis.

PF18B. Pursue the acquisition and construction of a major public gathering space of at least 60,000 square feet in a prominent location in Downtown Redding. The space shall be designed as a public square with benches, landscape areas, and fountains/public art.

PF18C. Program necessary storm-drainage improvements needed for the Downtown area.

PF18D. Identify potential locations for public parking facilities and pursue the acquisition of land as sites become available.

PF18E. Implement the adopted Specific Plan for Downtown Redding.

LIBRARIES

Library services within the Planning Area are provided by Shasta County. The Main Branch of the library is located in downtown Redding at 1855 Shasta Street. Due to funding constraints, the hours of operation for library facilities have decreased substantially over the past several years. The City of Redding provides some financial assistance for the library. However, the City does not anticipate that it will become a direct provider of library services and facilities.

GOAL **PF19** ADVOCATE ADEQUATE LIBRARY SERVICES TO MEET THE NEEDS OF CURRENT AND FUTURE PATRONS.

Policies to achieve this goal are to:

PF19A. Promote the construction of new libraries or the expansion of existing facilities as required to meet the needs of the community.

PF19B. Work with Shasta County to explore options for maintaining/increasing the number of hours that library facilities are available to the public.

PF19C. Encourage the provision of library outreach services for residents who are unable to visit library facilities.

FUNDING

One of the most important aspects of facilities and services planning is to determine the total anticipated costs of the desired facilities and services, and identify appropriate funding sources for initial construction and long-term maintenance. The following sections describe existing funding sources utilized by the City and general guidelines for future facility and services financing.

OVERVIEW OF CURRENT FUNDING MECHANISMS

Redding finances many of its services and the construction of some public facilities by various methods of cash payment. One of the most well known sources of cash funding is the City's General Fund. General Fund revenues come from property taxes, sales and use taxes, intergovernmental revenues, fees, use of property and money, and other smaller sources. The bulk of General Fund expenditures are devoted to public safety, which includes police, fire and animal control. The remaining expenditures are divided among general government, public works, development services, and recreation. Most General Fund expenditures are for employee salaries, vehicles, equipment, and general operations. The General Fund also contributes to the costs associated with various public facilities, particularly maintenance. However, more of those types of expenses are now being met by Enterprise Funds and Special Revenue Funds.

Enterprise Funds are accounts that are self-supporting through user fees. These fees are used for improvements and to pay debt service on borrowed funds. There are also one-time "hook-up" fees for water and sewer service. The City has established Enterprise Funds to pay for operations and capital development costs associated with electric utilities, water utilities, wastewater utilities, solid waste operations and the storm drainage system. Enterprise Funds have also been created for Redding's airport system, the Redding Area Bus Authority and the Redding Convention Center.

Special Revenue Funds are established to account for the proceeds of legally mandated programs or resources restricted to a special purpose. Sources for these funds include parking-related revenues, Community

Development Block Grant money, development impact fees, housing subsidies and transfers from special purpose State funds. The City currently maintains six Special Funds. These include: Parking, Street Maintenance, Community Development, Special Development, Housing and General.

Although cash funds are used to pay for some projects, most of the City's capital improvements are financed with borrowed money using four basic methods. One method is the sale of general obligation bonds. These bonds are paid off via a secondary property tax levied on all properties in the City. General obligation bonds typically fund improvements to parks, libraries, schools, police and fire stations, flood control and some street projects.

A second method is the sale of Revenue Bonds. These funds come from a known income stream, such as user fees or gasoline tax. This method is typically used to finance major street, water, sewer, and electric improvements.

A third method is the formation of a community facilities district. The Mello-Roos Community Facilities Act, enacted in 1982, permits cities, counties and special districts to form community facilities districts over specifically defined areas within their jurisdictions. These districts, more widely known as "Mello-Roos districts", are special financing entities through which a local government is empowered to levy special taxes and issue bonds authorized by two-thirds of the qualified voters of the district. In the past, Mello-Roos districts have provided a viable way for the City to fund public facilities and certain services. In addition, City policy has historically required the formation of a Mello-Roos district within a proposed annexation area to make up for property tax revenues foregone by the City to receive consent for the annexation from Shasta County.

A fourth method is redevelopment. Redevelopment areas within a city are identified on the basis of need and prevalence of blighted conditions. Bonds are issued to finance public improvement projects intended to counteract the blight. These bonds are paid off by the anticipated increase in property tax revenues resulting from increased property values in redeveloped areas. The City has adopted three redevelopment areas: the Shastec redevelopment area, a joint project with Shasta County and Anderson, in the vicinity of the Redding Municipal Airport, the Market Street area in Downtown Redding, and the Canby-Hilltop-Cypress area in eastern Redding. Bonds sold for redevelopment in the Market Street and Canby-Hilltop-Cypress areas have financed projects such as parking structures, freeway access ramps, and waterline and drainage improvements. A fourth area is currently under consideration in north Redding. If approved, it would be known as the Buckeye redevelopment area.

Private developers also make significant contributions toward the construction of public facilities. When developers construct their projects, they are required to install street improvements along the frontage of the property and pay fees to help finance citywide facility improvements. Developers dedicate rights-of-way for public streets and utilities, and sometimes land for parks and schools. They provide street, sidewalk and landscaping improvements. They also pay water, sewer and school fees to help finance facility expansions. Additionally, residential developers pay a fee to help finance land acquisitions and construction of public park facilities. The extent of public facility contributions by developers is generally determined by set guidelines and ordinances. On occasion, these contributions are arrived at through detailed negotiations on a case-by-case basis.

All major publicly funded facility improvements are programmed and allocated funds through the City's Capital Improvement Program (CIP). The size of the CIP fluctuates from year to year, depending on the improvements needed and the amount of money available to pay for projects. Very little General Fund money is used for CIP projects.

The City faces a variety of limitations that govern the funding of capital projects. The State of California places constitutional limits on the City concerning enhancement of revenues. Proposition 13, a constitutional amendment passed in 1978, limits the increase of property tax to 2 percent per year, although property may be reassessed when sold. More recently, Proposition 218 requires that special assessments and any future increases in those assessments receive voter approval by at least two-thirds of the affected property owners. The voters' authorization for bonds is also followed by several other checks and balances that control the expenditure of funds in the CIP. Because of these constraints, the City needs to continually look

for innovative ways to fund facilities and services. In order to meet these challenges, the development of additional public/private partnerships is likely to be explored, as well as the privatization of some services.

GOAL

PF20

ACHIEVE AND MAINTAIN ADOPTED FACILITY AND SERVICE STANDARDS THROUGH THE USE OF EQUITABLE FUNDING METHODS AND INNOVATIVE STRATEGIES.

Policies to achieve this goal are to:

PF20A. Determine the demand for new public facilities created by new development as compared to the demand for new facilities created by the community as a whole. Based on the results, determine the "fair share" of the financial contributions that are appropriate for both the community at large and new development.

PF20B. Prepare an updated impact fee ordinance that requires new development to pay its "fair share" of the cost to build needed public facility improvements. Facilities to be considered include, but are not limited to: public safety, parks, streets and intersections, water treatment and distribution, sewage collection and wastewater treatment, storm drainage, transit, and electric facilities.

PF20C. Where appropriate, distribute the responsibility to pay for new public facilities between existing and future development based on their respective demands on the system.

PF20D. Identify and pursue alternative funding sources that can be used for: capital improvement project construction, staffing and ongoing maintenance of public improvements. Expand the search for grant funding.

PF20E. Require the preparation of a fiscal impact analysis for all specific plans or significant general plan land use amendments and annexations. The analysis will examine the fiscal impacts on the City and other service providers that result from large scale development. The fiscal analysis shall project a positive fiscal impact form new development or include mechanisms to fund projected fiscal deficits. Exceptions may be made when new development generates significant public benefits (e.g., low-income housing, primary-wage-earner employment) and when alternative sources of funding can be obtained to offset fore gone revenues.

Air Quality Element

ACKNOWLEDGMENTS

The preparation of this element was made possible by a grant from the Shasta County Regional Transportation Agency and Air Quality Management District. The grant funds originated from a countywide motor vehicle registration fee authorized by AB 2766. The fees can only be used to fund programs and projects that will reduce air emissions from motor vehicles directly or indirectly.

Work on the draft element began in April 1993 with the formation of an advisory committee authorized by the City Council and appointed by Mayor Carl Arness. The Mayor's charge to each committee member set the stage for what was to be several months of meetings and rewrites of the draft document. In brief, the Mayor's charge was:

> *". . .to study the past and present trends, imagine the future, and propose a policy that will maintain our air quality. All of this must be done without sacrificing jobs, and I encourage you to focus on air quality planning as an opportunity to attract industry by touting the quality of life and air quality we enjoy and plan on protecting.*
>
> *As you approach your charge, please keep in mind that planning means little unless the implementation measures are effective, affordable, and equitable. A strong economy that features clean air and good planning is no small challenge and will be a formidable political challenge for members of the City Council, unless there is a reasonably shared community consensus regarding issues, solutions, and an ultimate vision of the future.*
>
> *Whatever policy and shared vision is developed, it must not jeopardize State and Federal funds for local transportation projects which are keyed to government mandates for improved air quality.*
>
> *Based on the diverse interests and talents of the advisory committee, I feel confident that the draft recommended policy will be the best that we can produce."*

The following individuals, representing the interests of their affiliated agencies and organizations, accepted this challenge by contributing their time, constructive criticism, and solutions, all of which were sprinkled with many compromises:

Advisory Committee

Shasta Builders Exchange
Kent Dagg

Greater Redding Chamber of Commerce
Tom Semingson, Frank Strazzarino, Jr., Michael Green

American Association of University Women
Susan Turner, Judy Ceragioli

Shasta Business Council
Lance Fredricksen

Sacramento River Council
Tryg Slettland, John Carr

Citizens at Large
Lou Gerard

Shasta County Board of Realtors
Marie Whitacre

Sierra Club
Kelly Clark, Vi Klasseen

League of Women Voters
Ruth Wingate

Tourism and Convention Commission
Commissioner Warren Lane

Staff of Reviewing Agencies

Shasta County
Jim Cook, Deputy Planning Director

City of Anderson
Tom Hart, Planning Director

City of Shasta Lake
Joe Hunter, Planning Director

Redding Area Bus Authority
Ray Duryee

Redding Public Works Department
Doug Will, Don Curtis

Air Quality Management District
Mike Kussow

Shasta County Department of Resource Management
Russ Mull

Redding Planning Department
Jim King, Project Coordinator
Judy Huskey, Joy Gaskey, Secretaries

Shasta County Regional Transportation Planning Agency
Dick Curry, John Stokes

Caltrans
Jerry Severson

Redding Convention and Visitors Bureau
John Gorman

Redding Housing Authority
Larry Morgon, Sarah Haddox

Economic Development Corporation
Jim Zauher

AIR QUALITY PLANNING ELEMENT OF THE REDDING GENERAL PLAN

I. INTRODUCTION

According to the Air Resources Field Research Office in North Carolina, the Sacramento Valley Air Basin has the highest air pollution potential in the United States because the area has over 70 air inversion days per year. The air basin, comprising 13 counties, is classified as being in violation of State ambient air quality standards. A violation of any one standard is termed "nonattainment." The limits of the air basin are determined by meteorological conditions, emission transport, and topography. The State Air Resources Board (ARB) has further divided the basin into two planning units called the Northern Sacramento Valley Planning Area and the Broader Sacramento Area. These divisions are based on the degree of pollutant transport from one area of the basin to another and the varying degrees of emissions within each area. The northern area, which affects seven counties including Shasta County, is classified as "moderately" nonattainment for ozone and particulates. The southern area affects six counties and is classified as being a "serious" nonattainment area. The air pollution districts of each planning area have different State-mandated planning restrictions which must collectively reduce locally produced pollutants to levels of attainment for the planning areas. The map on the next page depicts the air basin and planning areas.[1]

On a local level, air quality in the Redding metropolitan area of Shasta County is a reflection of the population growth of the region and the surrounding counties and the fact that Redding is a central place for urban demands including medical, retail, government, education, employment, housing, and transportation. The metropolitan area also draws customers from well beyond adjoining counties because of the outdoor recreational attractions of the North State. It should also be noted that the northern part of the valley is subject to significant ozone transport from the Broader Sacramento Planning Area. These factors, coupled with the region's climate, topography, and vast hydrocarbon-rich forest, have caused the air quality of the metropolitan area to become "moderately" polluted with ozone (smog) and particulates (dust and smoke).

The "moderate" pollution standard is based on health criteria established by the California Clean Air Act. If nothing is done to decrease pollution levels, then the region will be subject to expensive and punitive mandates of the Federal Clean Air Act including the denial of Federal grants and highway funds for transportation, transit, and sewerage projects.

The primary source of ozone pollution is vehicles which account for about 70 percent of the emissions. The remaining 30 percent is due to stationary land-use sources. Another significant County pollutant is particulates. The use of wood heating devices, open burning practices, and road dust all contribute to high particulate levels, especially in the winter months. Based on this, it makes sense to integrate air quality planning from the perspective of the Circulation and Land Use Elements of the City's General Plan.

A. PURPOSE AND SUMMARY OF AIR QUALITY ELEMENT GOALS

This element provides a program to control or reduce emissions associated with *new* and *modified* indirect sources of air pollution. Indirect sources include employment sites, shopping centers, sports facilities, housing developments, airports, places of business, etc.

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[1]The lower thresholds adopted by amendment to the Clean Air Act for ozone has resulted in a **recommendation** by the Environmental Protection Agency to designate Shasta County nonattainment for ozone.

An indirect source control program or rule incorporates strategies to reduce emissions including goals, policies, standards, and implementation measures related to land use and traffic circulation. This policy is intended as part of a comprehensive emissions reduction program which has a goal of achieving air quality attainment.

Methods of implementation must focus on threshold standards of pollution from land use and the application of *best available mitigation measures* (BAMMs) to reduce emissions. In a larger sense, this air quality policy is part of the regional strategy for improving air quality in the northern Sacramento Valley planning area, which includes seven counties. While air quality is often regarded as a regional problem, local land-use and growth decisions by the Cities of Anderson, Shasta Lake, and Redding and the unincorporated area of the County will profoundly affect the success of whatever technology is available regionally to combat air pollution with this in mind:

It is the purpose of this air quality policy to protect the health and welfare of our residents, businesses, and industries by promoting development that is compatible with air quality standards of the policy and the County's AQAP.

This is to be accomplished by the goals, policies, and implementation strategies of Chapter VI, which are summarized below:

- Applying *transportation control measures* (TCMs) and BAMMs through planning to augment the rules of the County's AQAP which are aimed at substantially reducing growth in vehicle miles traveled (VMT) and vehicles trips as required by the California Clean Air Act.

- Ensuring that Federal and State entitlement funds and grants for local transportation projects will not be lost, which could happen if the air quality declines to the point where the region becomes nonattainment under the Federal Clean Air Act, and ensuring that industries of the County are not unnecessarily forced to install expensive retrofit equipment to reduce emissions.

- Providing the planning process with necessary guidance to review proposed projects relative to stationary indirect sources of air pollution and guidance in applying mitigation measures to reduce the pollution.

- Planning for advancements in transportation technology so that land use and the transportation systems can more easily adapt to the technology.

- Supporting a communitywide program of the Air Pollution Control District aimed at educating developers and the citizenry regarding the need to modify our behavior in order to improve the air quality.

- Focusing community attention on the need to create a vision of what the metropolitan area should be and look like in the next 45 years relative to air quality, transportation, and land-use patterns.

- The specific standards for measuring the success of the element may be summarized as follows:

    1. Strive to achieve 5 percent reduction in emissions per year for NO_x and PM_{10} averaged over a three-year period.

    2. Substantially reduce rate of increase in passenger vehicle trips and miles per trip.

    3. Achieve State ozone standards to avoid being reclassified to a "serious" category of nonattainment.

4. Avoid mandate of applying emission devices to new sources based on an emissions output of 10 lbs/day. The current standard is 25 lbs/day.

5. Avoid application of expensive retrofit emission technology to existing industries and businesses.

6. Avoid **requirement** of reducing countywide vehicle miles traveled.

7. Avoid Federal sanctions by being classified as nonattainment under the Federal Clean Air Act.

8. Avoid Federal **requirement** for emission offsets for new industries.

9. Avoid Federal **requirement** to achieve a reduction in volatile organic compounds over a six-year period.

10. Avoid the loss of State and Federal transportation funds for local projects.

11. Avoid development moratorium caused by noncompliance with County's Nonattainment Plan and California Clean Air Act.

12. Avoid reduction in tourism and sales tax due to deterioration of our air quality.

13. Maintain community health through improved air quality.

14. Provide a strong basis to justify that the County ***not*** be reclassified to a "serious" nonattainment category, even if the County still exceeds State ozone standards. This can be done by demonstrating that the County and its cities have adopted and implemented air quality elements that apply best available mitigations to new projects which reduce vehicle emissions and that continued violation of the State standard is due to ozone transport from Sacramento, which currently is responsible for 90 percent of the days of violation.

B. AIR POLLUTION AND ITS SIGNIFICANCE

There are nine pollutants for which California has established ambient standards. Six of these are also regulated by the Federal government, except that the Federal standards are less restrictive than the State's standard. For Shasta County, the applicable pollutants are ozone (O_3) and particulates (PM_{10}).

Ozone

Ozone, commonly called smog, is created by a combination of chemical interactions which can concentrate the pollutant low to the ground by the force of inversion or air pressure. Ozone has a slightly pungent, irritating odor. In general, smog may be defined as:

Oxides of Nitrogen + Hydrocarbons + Sun = Smog

The County's Air Quality District monitors ozone at monitoring stations located in South Redding and in Anderson. Ground-level ozone is distinct from the layer of ozone that is seven or more miles above the earth's surface in the stratosphere and protects the earth from the sun's harmful ultra-violet radiation.

Moderate concentrations of ozone can damage materials. For example, it can cause fading in textile materials and will cause rubber products to crack and lose elasticity and strength.

Recent clinical studies show that chronic exposure to smog irreversibly reduces lung capacity, lowers stamina, and leaves people more vulnerable to long-term respiratory problems. Smog is especially harmful for children, senior citizens, and those who suffer from heart or lung disease. At high concentrations, ozone causes significant health and environmental problems. It can irritate the respiratory tract; produce impaired lung function such as inability to take a deep breath; and cause throat irritation, chest pain, cough, lung inflammation, and possible susceptibility to lung infection. Smog aggravates existing respiratory conditions like asthma.

Smog can reduce the yield of agricultural crops and injure forests and other vegetation. Ozone is the most injurious pollutant to plant life, but oddly enough, plants can assist in the production of ozone through the emission of hydrocarbons which interact with NO_x to create smog. The table below illustrates the effects of ozone on selected plants at various concentrations. While Shasta County is not an intense farming region, the table is pertinent because it illustrates the effects of ozone on plant life, which is abundant in the County. For reference purposes, the California standard for ozone is .09 ppm = 176.6 μg/m^3: **phm** = parts per million; **μg/m^3** = micrograms per cubic meter. **The Redding Metro area has exceeded ozone concentrations of 200 μg/m^3 on many occasions in the last six years.** Shasta County has averaged 0.095 ppm for an 8-hour period during 1997, 1998, and 1999.

TABLE 1
POLLUTION EFFECTS OF OZONE ON PLANTS

Amount	Duration	Effect
54 μg/m^3	2 hr	38% leaf damage to some sensitive plants
200 μg/m^3	1 hr	minimal visible injury to spinach, radish, oak, and white pine
400 μg/m^3	4 hr	79% leaf injury in pinto bean
560 μg/m^3	4 hr	75% leaf damage to some sensitive plants
700 μg/m^3	2 hr	90% leaf injury in pinto bean

Source: Jones & Stokes Assoc. Inc., 1980, Volume I, Basic Ecological Concepts, FWS/OBS-80/45.

As noted in the table above, plants have different thresholds of sensitivity to ozone. In general, high and moderately sensitive plants experience visible injury from ozone based on the following concentrations:

TABLE 2
HIGH AND MODERATE PLANT SENSITIVITY TO OZONE

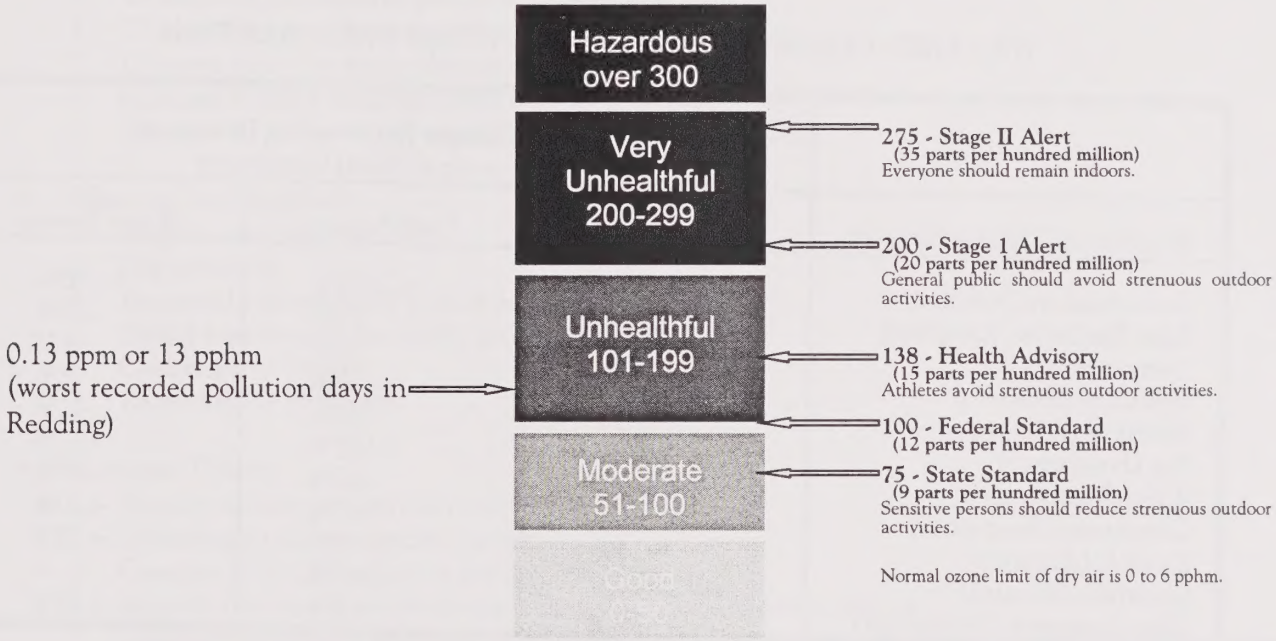
Exposure Period	High Sensitivity (in ppm)	Moderate Sensitivity (in ppm)
0.5 hour	.25 - .40	4.0 - 5.5
1.0 hour	.10 - .25	2.5 - 4.0
2.0 hours	.07 - .15	1.5 - 2.5
4.0 hours	.04 - .10	1.0 - 2.0
8.0 hours	.03 - .07	0.7 - 1.5

Source: IBID.

California established the health advisory level after medical research showed that ozone posed a health threat at a lower concentration (.09 ppm) than the Federal standard (.12 ppm), especially for children, the elderly, persons with heart or lung disease, and during strenuous exercise. California's ozone standard (9 pphm or .09 ppm) has always been more protective of public health than the Federal standard of 12 pphm (0.12 ppm) or 100 PSI (Pollutant Standards Index). **The concentration of ozone in the Redding area (attributed to local sources) has met or exceeded with a reading of 0.13 ppm.**

The figure below provides some insight into the significance of various levels of pollution based on a standard index. The Pollutant Standards Index (PSI) was developed by the Environmental Protection Agency to standardize reporting and to convert air pollution concentrations to a simpler scale. The figure shows how intervals on the PSI scale relate to the potential health effects of ozone at the measured concentrations.

FIGURE "A"
POLLUTANT STANDARDS INDEX FOR OZONE
(PSI scale is a relative number without units)



Particulates (PM_{10})

Suspended particulate matter 10 micrometers (millionths of a meter) or less in diameter is referred to as PM_{10}, which consists of a mixture of manmade and natural substances including wood smoke, dust from unpaved roads, construction, and agricultural activities. It comes from a variety of residential, industrial, and mobile sources and may be emitted directly or formed in the air by transformations of gasses. These tiny particles are a potential cause of significant health effects since they can more easily bypass the respiratory tract's natural filtering system and can lodge deep in the lungs.

The microscopic particles can affect breathing and respiratory symptoms, causing increased respiratory disease and lung damage and possibly premature death. Children, the elderly, and people suffering from heart or lung disease (like asthma) are especially at risk. The particles also damage paint, soil clothing, and reduce visibility.

Federal standard for PM_{10} is 150 micrograms/cubic meter; the State standard is 50 micrograms/cubic meter. **For the Redding area, concentrations of PM_{10} have been as high as 85 micrograms/cubic meter.** These concentrations were attributed to wood smoke from home heating and agricultural burning.

C. URBANIZATION, WEATHER, AND AIR QUALITY

The foregoing discussion focused on the effects of ozone and particulates because Shasta County exceeds the State's threshold standards of these pollutants. In reality, the effects of air pollution on the County ought to include all categories of pollution, even those for which the State and Federal governments do not have standards. The idea is to develop programs to reduce emissions and threshold violations while ensuring that other pollutants do not exceed threshold levels. If the rate of emissions remains the same for the County relative to the rate of growth, the County will eventually violate all pollutant thresholds of the State and Federal governments. This is because urbanization can increase the volume and concentration of emissions. The table below emphasizes how urbanization can affect weather and increase pollution, urban temperatures, etc.

TABLE 3
WEATHER CHANGES CAUSED BY INTENSE URBANIZATION

	Average Changes Expressed as Percent or Magnitude of Rural Conditions		
Weather & Climate Elements	Annual	Cold Season	Warm Season
Contaminants (Volume)	+1000%	+2000%	+500%
Solar Radiation (Langleys)	-22%	-34%	-20%
Temperature (°F)	+2°	+4°	+1°
Humidity (Relative)	-6%	-2%	-8%
Visibility (Frequency)	-26%	-34%	-17%
Fog (Frequency)	+60%	+100%	+30%
Wind Speed (mph)	-25%	-20%	-30%
Cloudiness (Frequency)	+8%	+5%	+10%
Rainfall (Amount)	+14%	+13%	+15%
Snowfall (Amount)	±10%	±10%	---
Thunderstorms (Frequency)	+16%	+5%	+29%

Source: *Urban-Industrial Effects on Clouds and Precipitation*, Utah State University, Logan, UT, 1973, p 135.

Generalized direct and indirect effects of urbanization are outlined below:

- Effects on meteorology:
  1. Visibility
  2. Cloud/haze/fog formation
  3. Urban heat islands

- Effects on materials:
  1. Corrosion, pitting, and chemical disintegration
  2. Discoloration and fading
  3. Embrittlement, cracking, and reduced tensile strength

- Effects on plants:
  1. Growth and yield reductions
  2. Tissue damage
  3. Increased sensitivity to pathogens
  4. Altered susceptibility to environmental stresses

- Effects on fish, wildlife, and domestic animals:
  1. Direct toxicity and metabolic disruptions
  2. Respiratory problems
  3. Increased susceptibility to disease
  4. Reproductive disruptions or failure
  5. Behavioral changes

- Effects on ecosystems:
  1. Changes in vegetation composition
  2. Changes in fish or wildlife abundance
  3. Changes in successional patterns
  4. Changes in microclimates and geophysical processes
  5. Changes in soil or water chemistry
  6. Changes in litter decomposition rates or products
  7. Changes in productivity, energy flow, and nutrient cycling

- Effects on human health:
  1. Respiratory problems
  2. Eye irritation
  3. Increased susceptibility to bacterial or viral infections
  4. Direct toxicity and metabolic problems
  5. Carcinogenic effects
  6. Reproductive problems

- Economic Effects:
  1. Require industry to retrofit equipment
  2. Influence on technological change
  3. Creation of the air pollution control industry
  4. Influence on site selection and site design for development projects
  5. Unmitigated impacts will cause the City/County to lose State and Federal funding for transportation projects.

II. STATUTORY AIR QUALITY STANDARDS AND MANDATED REQUIREMENTS

California began setting air quality standards in 1969 under the provisions of the Mulford-Carrell Act. With the passage of amendments to the Clean Air Act in 1970, the Federal government began adopting such standards for the entire country. **As stated by former President Bush, the promise of the 1990 Federal Clean Air Act is "Every American expects and deserves to breathe clean air. . ."**

Air quality standards define the levels of various types of air pollutants that may not be exceeded for certain periods of time in defined areas. There are State and Federal ambient air quality standards for ozone, carbon monoxide, oxides of nitrogen, sulfur dioxide, PM_{10}, and lead. If standards are met, eye and throat irritation—and more serious health effects—are not expected to appear among even the most sensitive members of the public. Table 4 provides a comparison of State and Federal standards.

TABLE 4

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standard	National Standards
Ozone	1-Hour	0.09 ppm (180 $\mu g/m^3$)	0.12 ppm (235 $\mu g/m^3$)
	8-Hour	n/a	0.08 ppm*
Carbon Monoxide	8-Hour	9.0 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)
	1-Hour	20 ppm (23 mg/m^3)	35 ppm (40 $\mu g/m^3$)
Nitrogen Dioxide	Annual	n/a	0.053 ppm (100 $\mu g/m^3$)
	1-Hour	0.25 ppm (470 $\mu g/m^3$)	n/a
Sulfur Dioxide	Annual	n/a	80 $\mu g/m^3$ (0.03 ppm)
	24-Hour	0.04 ppm (105 $\mu g/m^3$)	365 $\mu g/m^3$ (0.14 ppm)
	1-Hour	0.25 ppm (655 $\mu g/m^3$)	n/a
Particulate Matter-Fine ($PM_{2.5}$)	Annual Arithmetic Mean	n/a	15 $\mu g/m^3$
	24-Hour	n/a	65 $\mu g/m^3$
Suspended Particulate Matter (PM_{10})	Annual Arithmetic Mean	n/a	50 $\mu g/m^3$
	Annual Geometric mean	30 $\mu g/m^3$	n/a
	24-Hour	50 $\mu g/m^3$	150 $\mu g/m^3$

Notes: ppm = parts per million
mg/m^3 = milligrams per cubic meter
$\mu g/m^3$ = micrograms per cubic meter
* Proposed Federal standard under legal challenge
Source: U.S. Environmental Protection Agency, CARB.

A. STATE-MANDATED REQUIREMENTS

The ambient air quality standards of the foregoing section for the California Clean Air Act must be achieved through a variety of actions by local governments. The scope of this air quality policy focuses on two of many requirements of the County's Air Quality Attainment Plan (AQAP) as discussed below.

To assist local governments in meeting ambient air quality standards, the California Clean Air Act of 1988 gave regional air quality management districts new authority to design, adopt, implement, and enforce comprehensive plans for attaining and maintaining both the Federal and the more stringent State air quality standards by the earliest practical date. Among its provisions, the California Clean Air Act provides air quality management districts with the authority to establish controls on mobile and stationary sources of pollution.

Each nonattainment district is required to adopt an attainment plan with rules to achieve attainment. For the Northern Sacramento Valley planning area of the air basin, the plans for each of the six counties, including Shasta County, are basically the same and require each district to adopt transportation control measures (TCMs) and an indirect source control program.

The 1988 Clean Air Act requires that the County's air quality district adopt a program or air quality attainment plan that will **strive to achieve a 5 percent reduction in emissions per year for each nonattainment pollutant averaged every consecutive three-year period.**

The second mandated requirement occurred as the result of a 1992 amendment to the Clean Air Act (AB 2783, Sher). The amendment requires areas with moderate air pollution that contain an urbanized area of 50,000 people or more to **"substantially reduce the rate of increase in passenger vehicle trips and miles traveled per trip" by the earliest practicable date** [H&SC 40918(c)]. The State Air Resources Board (ARB) has interpreted this requirement to mean having TCMs sufficient to hold the growth in vehicle miles traveled equal to the population growth rate.

In the 1980s, Shasta County averaged annual growth rates of 5.5 percent for vehicle miles traveled (VMT) (Caltrans). Recent VMT trends indicate that growth in VMT is slowing down, which is probably due to the recession; however, TCMs are still needed to achieve ambient air quality standards.

This requirement is only applicable to the urbanized area of the County, but may be expanded to include the whole County or district later on if standards are not met. For now, the severity of the TCMs necessary to meet this requirement are left to the discretion of the air district, although the State does have performance standards.

The table following this section provides a summary of the various required actions based on the severity of nonattainment. For purpose of this policy, only the required actions dealing with *transportation control measures* and *indirect source control programs* will be addressed with the understanding that the other measures are being addressed on a regional level by enforcement actions of the Air Pollution Control District (APCD) based on the County's AQAP.

Shasta County Air Quality Attainment Plan (AQAP)

The goal of the plan is to achieve the State's ambient air quality standard for ozone at the earliest possible date.

The plan details sources and levels of emissions and provides for control measures in accordance with the 1994 State Implementation Plan and California Clean Air Act.

TABLE 5
CALIFORNIA CLEAN AIR ACT
SUMMARY MAJOR PLANNING REQUIREMENTS

	Ozone Classification			
	Moderate .09-.12 ppm	Serious .13-.15 ppm	Severe .16-.20 ppm	Extreme .20 ppm
Mandated Date to Achieve Attainment	1997	1997	1997	1997
MANDATED ACTIONS:				
Attainment Demonstration Air quality plans must demonstrate attainment of the State standards by the earliest practicable date	X	X	X	X
Transportation Control Measures ▸ TCMs required in urbanized areas with populations of ≥ 50,000 to substantially reduce growth in VMT and vehicle trips	X	X	X	X
▸ Prescribed average vehicle ridership (AVR) by 1999 and no net increase in vehicle emissions after 1997 if the district contains Standard Metropolitan Statistical Area of ≥ 250,000 population **(see note)**	N/A	1.4 AVR	1.5 AVR	1.5 AVR
New Source Review No net increase permitting program for new/modified sources with prescribed levels (tons/year) of emissions	25 tons/year	15 tons/year	10 tons/year	All sources
▸ Best available control technology (BACT) for new sources with emissions output as prescribed	25 lb/day	10 lb/day	10 lb/day	10 lb/day
Retrofit Controls (existing stationary sources) ▸ Reasonably available control technology (RACT) for MODERATE areas (sources > 250 tons/year must apply BARCT) ▸ Best available retrofit control technology (BARCT) for SERIOUS and ABOVE areas	RACT	BARCT	BARCT	BARCT
Area and Indirect Source Control Programs (i.e., Air Quality Policy of General Plan)	X	X	X	X

Note: Shasta County is a "moderate" nonattainment area under the California Clean Air Act. State law [Health and Safety Code Section 40918(g)] requires "bump-up" to a serious classification if ozone levels are not reduced (i.e., no more than three exceedances per year at any monitor).

ppm = parts per million
VMT = vehicle miles traveled

III. EMISSION INVENTORY, OZONE TRANSPORT, AND EMISSION REDUCTION SCHEDULE

A. EMISSION INVENTORY (PAST CONDITIONS)

The California Clean Air Act (CCAA) requires that nonattainment districts like Shasta County achieve a 5 percent annual reduction in emissions of nonattainment pollutants until the State ambient air quality standards are met. The benchmark for this reduction standard is the 1990 Emission Inventory, which is documented in the district's Air Quality Attainment Plan.

The table below summarizes 1990 emissions for Shasta County and indicates that about 59 tons of ROG and 63 tons of NO_x were produced each day. During 1993, 1994, 1995, and 1996, the County had 27 days when ozone levels exceeded the State standard of .09 ppm. The Federal standard of .12 ppm was not exceeded.

TABLE 7
NORTHERN SACRAMENTO VALLEY AIR BASIN SHASTA COUNTY EMISSIONS

Summary of 1990 Emissions by Major Source Category - Tons per Day (TPD)		
Source Category	*ROG*	*NO_x*
Stationary Sources		
Fuel Combustion	2.24	1.63
Waste Burning	1.85	.18
Solvent Use	4.92	0
Petroleum Processes	.3	0
Industrial Processes	.02	0
Miscellaneous Processes	1.08	0
Total Stationary Sources	10.41	1.81
Mobile Sources		
On-Road Mobile	42.85	54.33
Other Mobile	5.54	7.35
Total Mobile Sources	48.39	61.68
Total Shasta County	58.8	63.49

Source: Shasta County Air Quality Attainment Plan.

An understanding of how ozone is produced in the northern end of the valley is important. Aside from human-produced hydrocarbons, biogenic hydrocarbon emissions are produced by plants. All of these hydrocarbon emissions are available to react with a small amount of NO_x to form ozone. With vast forested areas of the north valley, emission reductions of NO_x are preferred over reductions in ROG. Table 7 demonstrates that a primary source of emissions (NO_x and ROG) is from vehicles. This is why it is critical to reduce the total number of vehicle miles traveled and cold starts, which can be accomplished through land-use planning and development of a multimodal transportation system.

For PM_{10}, the County had a total of 13 days in the 1993–1996 time period when the State standard was exceeded.

B. OZONE TRANSPORT

The California Clean Air Act requires the State to establish mitigation measures for upwind districts commensurate with the degree of contribution to downwind exceedance of State standards. Since the precise degree of transport contribution is not currently known, the State has adopted three qualitative categories of transport.

"Overwhelming," "Significant," and "Inconsequential." "Overwhelming" transport refers to the impacts of transported pollutants or precursors (ROG and NO_X) which cause the exceedance in the downwind area, (i.e., ozone transport from the Sacramento area to Redding). "Significant" transport refers to the impacts which contribute to the exceedance in the downwind area, (i.e., the exceedance is caused by both upwind and local sources). "Inconsequential" transport refers to the impacts which do not contribute to the exceedance in the downwind area, but are caused by local sources alone.

In 1993, the Bay Area/Broader Sacramento Area to Upper Sacramento Valley Transport working group was formed. The purpose of the group was to analyze transport data in an effort to verify the level of transport-caused exceedances. The working group determined that it is evident that there is transport taking place at the surface and aloft. The transport aloft normally affects the northern upper Sacramento Valley, while surface transport normally affects the southern valley, closer to the metropolitan Sacramento area.

Based on the analysis, the California Air Resources Board (CARB) recommended that the ozone violations be classified as "Significant" transport at Redding, Williams, Yuba City, and Red Bluff on some days and on other days, "Overwhelming" transport at Yuba City, Willows, Colusa, Redding, Chico, and Red Bluff. The transport classification of "Inconsequential" was recommended to be discontinued.

A Shasta County Air Quality Management District- (AQMD) sponsored field study and data analysis indicated that during the 1994, 1995, and 1996 ozone seasons, Shasta County's ozone problems were exacerbated by substantial transport of ozone and ozone precursors from the southern Sacramento Valley.

IV. FUTURE OUTLOOK

The shape that the metropolitan area of Redding will take in the next two to three decades will have an important impact on the future of our air quality and traffic management. Research indicates that land-use strategies can reduce vehicle trips, vehicle miles traveled, and the number of engine cold starts.

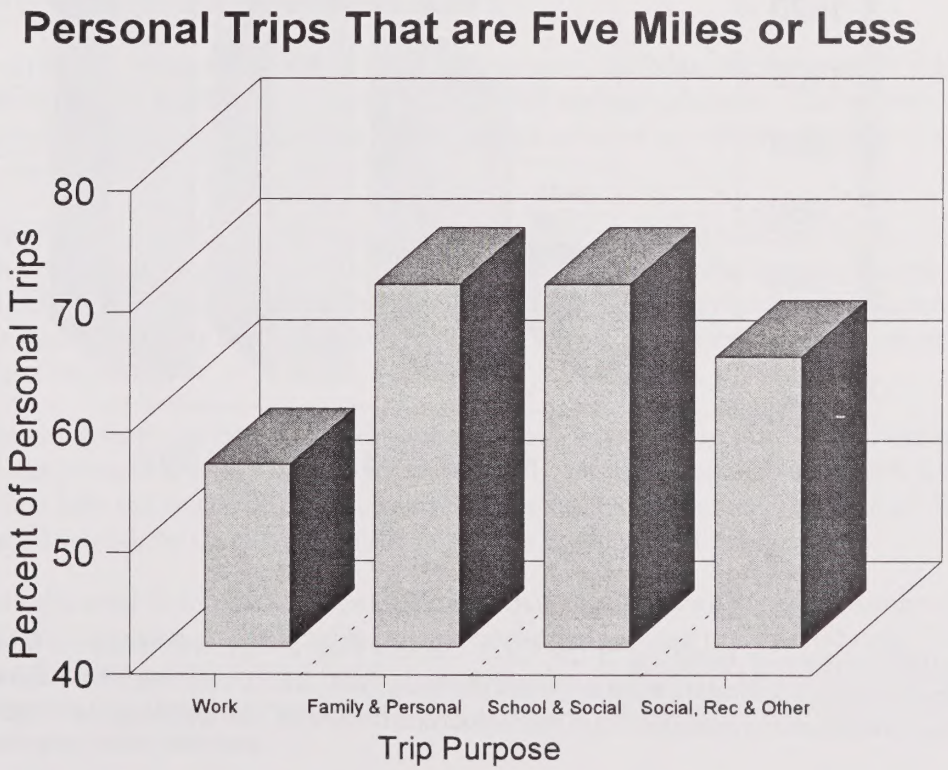
A. VEHICLE MILES TRAVELED (VMT)

During the past 20 years, total "vehicle miles traveled" have increased twice as fast as the rate of population growth. We are driving more often, longer distances, and we also tend to be driving alone more often. Nationwide, total VMT increased by 82 percent compared to an increase in population of 23 percent between 1969 and 1990.

In California, the total annual VMT more than doubled between 1970 and 1990, increasing from 115 billion to over 250 billion miles of travel per year. During the same period of time, the State's population grew by about 51 percent. (Source: State Air Resources Board.)

Starting a vehicle that has not been driven for about one hour produces a significant amount of tail-pipe emissions because the catalyst in the catalytic converter is not yet warm enough to fully combust the exhaust gases. These are often referred to as "cold start" emissions. **The cold start typically produced more than one-half of the total emissions from a vehicle trip under 20 miles in length and 78 percent of the emissions from a trip of 2 miles or less.** Reducing the number of short vehicle trips can thus help reduce emissions from cold starts. (Source: IBID).

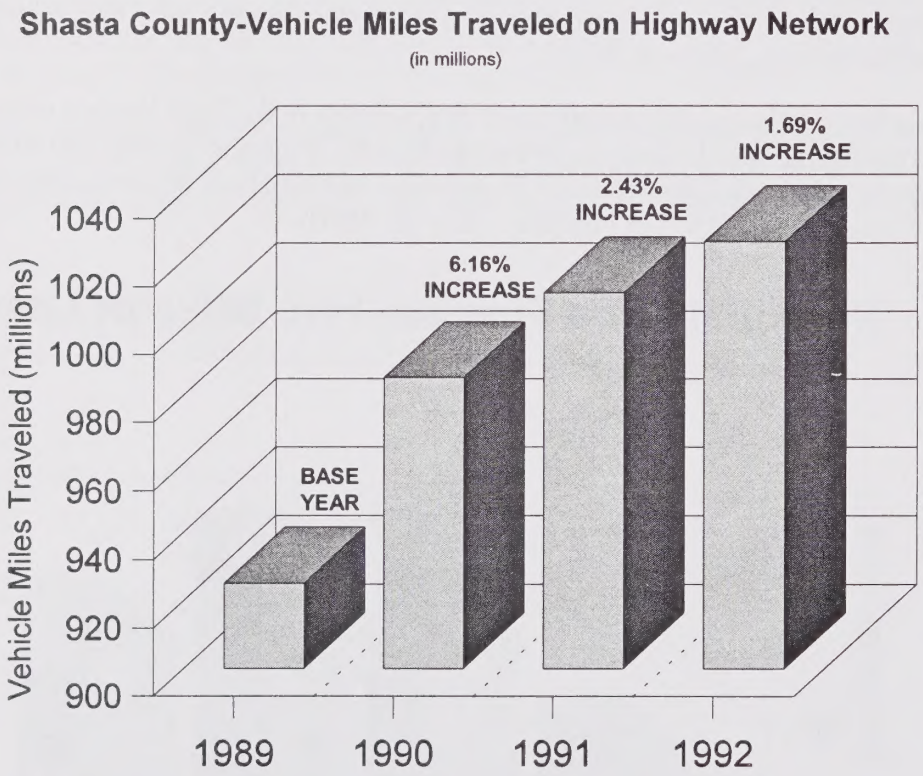
The following figure indicates the percentage of personal trips in the State that are five miles or less. The location and configuration of land use in part determines the distances people travel to reach employment sites, stores, houses, and other destinations. These factors also influence which mode of transportation they chose—car, vanpool, bus, walking, or bicycling. (Source: IBID).



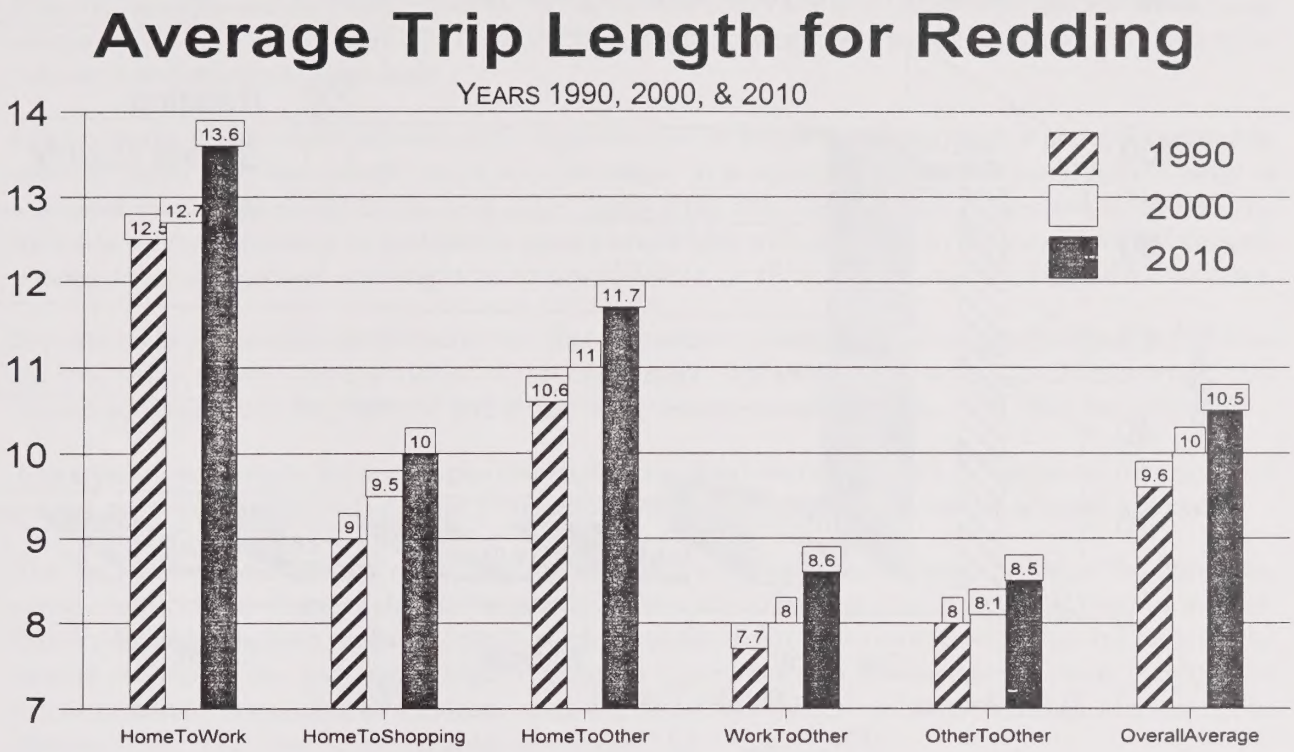
Total vehicle miles traveled in Shasta County have steadily increased, but at a declining rate. The following figure shows that the biggest increase for the last four years occurred in 1989-90 with a 6.16 percent increase. The declining rate of increase is probably due to the drought and the recession of the 1990s, which affected tourism.

According to a 1991 report on Shasta County Transportation Control Measures, VMT in Shasta County is expected to increase by 25 percent by the year 2010. The report further concludes that the State is stringent on road vehicle emission standards, and the attrition of older less efficient vehicles will result in a decrease in the average emissions per VMT. This may produce a decrease of 35 percent in ROG between 1992 and 2010, but NO_x emissions are only expected to decrease moderately through the year 2000 when no further technological improvements are expected. (Source: Transportation Control Measures Plan for Shasta County, by Jacobs Engineering Group, Inc., Santa Barbara, 1991).

The State Air Resources Board has suggested that districts categorized as "moderately" polluted with ozone can judge the annual progress toward meeting attainment by reducing the annual growth rate in VMT to 50 percent of the VMT growth in the 1980s. For Shasta County, this means the annual growth in VMT should not exceed 2.8 percent. According to Caltrans, the average rate for VMT over the last three years (1989-92) has been 3.42 percent, which is not within the State's suggested performance standard.



Based on traffic computer modeling of the City's General Plan and growth trends, it is forecasted that the overall trip length for commuters will increase in the years 2000 and 2010. This projection assumes that there is significant investment in transportation infrastructure; otherwise, the trip length will increase dramatically.



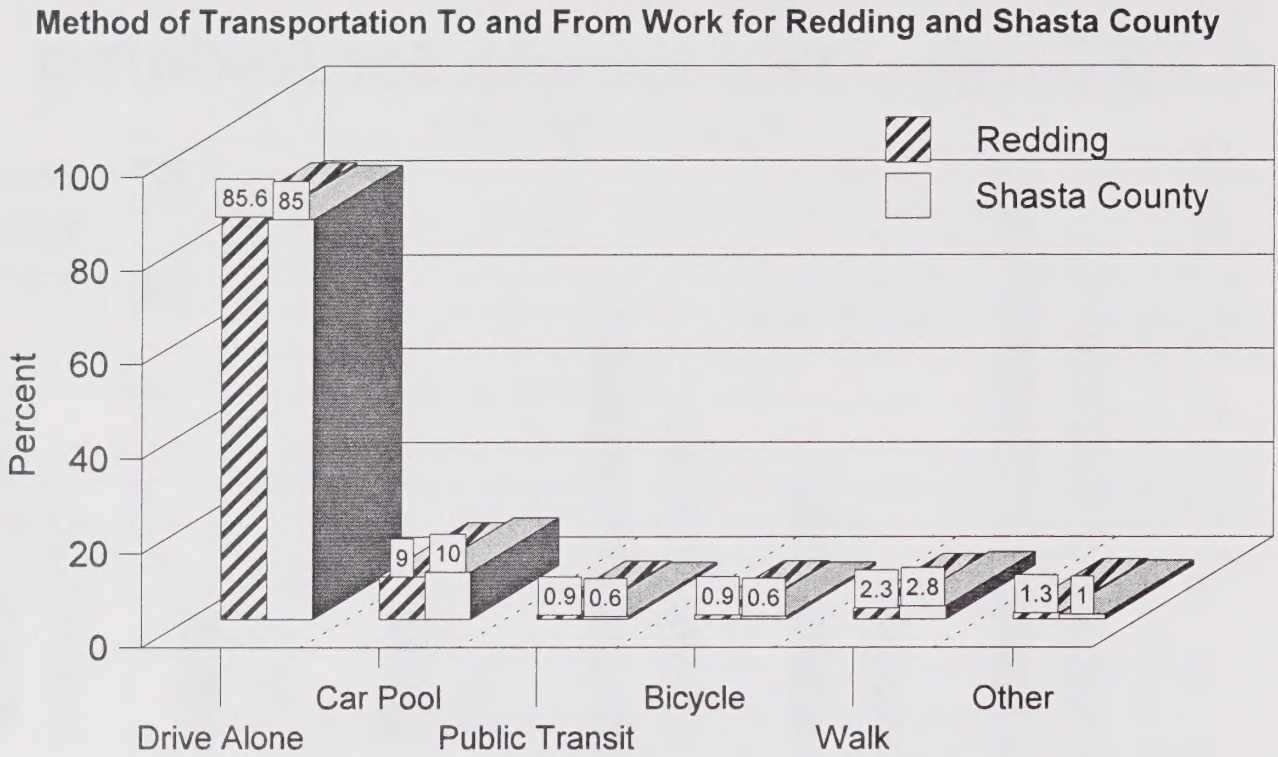
B. AIR QUALITY AND THE COST OF SPRAWL

Less costly land prices in fringe areas of most metropolitan areas, including the fringe areas of Redding, have helped to disperse development patterns and reduce overall regional densities. This pattern of growth has generally resulted in longer travel distances and increased reliance on vehicles for personal mobility and decreased air quality.

Also, large areas of low-density housing generally cannot justify or support effective levels of transit service. The minimum density threshold for minimal local bus service to residential areas is between four and six dwelling units per acre. At or above seven dwelling units per acre, bus service may be improved to one-half hour from one-hour headways if this density is clustered and/or maintained over a large enough area to provide sufficient ridership.

Clusters of medium-density residential areas that average 7 to 15 dwelling units per acre can generally support frequent local bus service. If such densities are maintained over a large enough area, with good pedestrian accessibility, then light rail transit service may also become feasible. (Source: The Linkage Between Land Use, Transportation, and Air Quality; State Air Resources Board, June 1993.)

All this points to the need for local and regional planning that avoids sprawl. Aside from improved air quality and decreased traffic congestion, the benefits of less sprawl mean less cost to City residents. The degree that the County and the metropolitan area of Redding have fostered dependency on the automobile is illustrated by the following chart on transportation modes. The chart also indicates little investment in land-use and multimodal transportation planning.



Development costs vary with lot sizes, distance to central facilities, proximity to existing development, community demographics, existing service capacity, and the requirements of local codes and standards. Yet, numerous studies dating back to 1955 all point toward a similar conclusion—sprawl is a significant burden on both home buyers and taxpayers.

While on-site development costs (sidewalks, sewer laterals) are passed on to buyers by developers as part of the price of the home, sprawl-related costs that are off site (trunk sewers, water mains, schools, fire stations, treatment plants, widening roads) are another story. While the City is charging impact fees to developers for hooking up to community infrastructure, it is frequently the case that the full costs of off-site infrastructure (including ongoing maintenance) go unpaid and, as a result, everybody pays—indirectly. (Source: "The Cost of Sprawl," Pas Memo, American Planning Association, February 1993).

For example, when new developments are built far from the water and sewer treatment plants or schools, they create higher incremental or "marginal" costs for adding new sewer collection system capacity or operating school buses. By contrast, the marginal cost of new development closer to existing services or facilities is lower. However, because costs currently are evenly distributed among all users by average-cost pricing, those who live farther away pay proportionately less. As a result, some users subsidize other users. Also, it should be noted that the funding for road maintenance is from gas tax and the City's General Fund and the long-term availability and adequacy of the funds relative to the expansion of the street system cannot be guaranteed.

C. FUTURE TECHNOLOGICAL ADVANCEMENTS IN TRANSPORTATION

Potential advancements, clean-burning fuels, and electrical vehicles (EVs) hold great promise in meeting emission-reduction requirements, beginning in about 20 years. Other auxiliary potential improvements

include compressed natural gas vehicles; electric buses powered by in-road, guide-rail paths; and light-rail (electric) multiple-unit commuter systems. While the electrical car has the greatest potential for addressing air quality issues, its omnipresence on roads and general public acceptance parallel to that of the combustion vehicle is probably many years away.

Currently, the cost in electrical vehicles is about $20,000 to $60,000 and the range is about 50 miles (top speed 65 mph) with five to eight hours for a recharge. It is anticipated that EVs could have a range of 150 miles on a single charge by the year 2013. Even if the cost through mass-production is lowered, the infrastructure requirements for nationwide service would have to be in place. In the meantime, EV research is being done on a flywheel as an electro-mechanical device, on EV fuel cells, and on advanced EV batteries.

Motorists take for granted the infrastructure that supports the nearly 190 million gasoline-powered cars on the road today. There is a gas station at almost every major commercial intersection; mechanics armed with hi-tech equipment can fix problems; and if they want, owners can change their own oil in the driveway.

This sophisticated system did not happen over night. It evolved over many years. It is believed that motorists are not going to abandon their current combustion vehicles and this support system without just cause.

The electrical-vehicle operator must have the assurance that the infrastructure to support the operation, maintenance, and servicing of electric vehicles is in place when the transition to electrical vehicles is made. Broadly defined infrastructure for electrical vehicles includes techniques and equipment used to recharge the electric vehicle, service and maintenance training for mechanics, and development of safety protocols for rescue personnel responding to accidents involving electrical vehicles. (Source: "Parking Magazine, The Electrical Car: The Next Transportation Revolution," July/August 1993).

If market forces respond favorably to zero-emission vehicles, then most households in California and Shasta County could have at least one EV for short (day-long) commuter trips totaling 30 to 50 miles by the year 2013, which would solve much of the pollution problem caused by cold combustion engine starts. The problem is that there will be significant traffic gridlock caused by too many combustion vehicles and EVs unless the approach to traffic and land-use planning changes.

All of this points to the long-term need to reduce VMTs for any type of vehicle including combustion vehicles and possibly EVs, to reduce the number of cold engine starts, to increase the occupancy of commuter vehicles, and to increase development of multimodal transportation—none of which can occur without proper land-use planning, funding for infrastructure, and public acceptance.

V. ISSUES, GOALS, POLICIES, AND IMPLEMENTATION

A. COMMUNICATION, COOPERATION, AND COORDINATION

ISSUE:

AIR POLLUTION IS A COMPLEX PROBLEM WITH MANY POTENTIAL INEQUITIES. ALL LEVELS OF GOVERNMENT ARE RESPONSIBLE FOR SOLVING SOME PORTION OF THE PROBLEM. OFTEN THE RESPONSIBILITIES OF ONE LEVEL OF GOVERNMENT OVERLAP WITH ANOTHER. IN ORDER TO DEVELOP EFFECTIVE PROGRAMS AND REDUCE POLLUTION EMISSIONS, EFFECTIVE COMMUNICATION, COOPERATION, AND COORDINATION ARE VITAL. THE PROBLEM OF COOPERATION IN THE AREAS OF LAND-USE AND TRANSPORTATION PLANNING IS HAMPERED BY THE CONCERN THAT ADJOINING JURISDICTIONS WILL NOT COMMIT TO MUTUAL RESTRAINTS WHICH MAY RESTRICT LIFESTYLE CHOICES, ECONOMIC GROWTH, AND URBAN EXPANSION.

GOAL 1:

EFFECTIVE COMMUNICATION, COOPERATION, AND COORDINATION IN DEVELOPING AND IMPLEMENTING COMMUNITY AND REGIONAL AIR QUALITY PROGRAMS.

(Discussion: The environmental assessment process required under the California Environmental Quality Act [CEQA] is by far the most important tool for local government to communicate with other agencies and the public the importance of air quality impacts of development. Strong and consistent application of CEQA can make a significant difference in project level air quality impacts. Each jurisdiction is responsible for ensuring that CEQA is mutually complied with.)

OBJECTIVE 1A: TO ACCURATELY DETERMINE AND FAIRLY MITIGATE THE LOCAL AND REGIONAL AIR QUALITY IMPACTS OF PROPOSED PROJECTS.

Implementation Strategy:

- The goals and objectives of this element can only be achieved if there is adequate funding for the increased responsibilities of the Planning Department imposed by the California Clean Air Act, congestion management legislation, and the County's Air Quality Attainment Plan.

Policy 1 (Air Quality Analysis)

The City will require an air quality impact analysis using the recommended methods promulgated by the Air Quality Management District (AQMD) for all projects that are subject to CEQA review and which exceed emissions thresholds established by the AQMD.

Implementation Strategy:

- The City will follow the air quality analysis processing procedure illustrated in the flow chart at the conclusion of the element and as discussed in Chapter VII.
- Participate with the AQMD in developing and refining existing countywide emission thresholds and procedures for performing air quality impact analysis. These methods are set forth in Chapter VII of this element.
- To meet emission thresholds of Chapter VII, the following standards shall apply to each proposed project as explained in Section I of Chapter VII:

1. If the proposed use does not exceed Level "A" emission thresholds, then the use must at least reduce emissions by 20 percent by applying BAMM (this standard addresses the need to mitigate the cumulative impacts of individual small projects).

2. If, after applying BAMM, the use still exceeds Level "A" threshold, then the use must at least achieve a minimum emission reduction of 20 percent with BAMM.

3. If, after applying BAMM, the use still exceeds Level "B" threshold, then a minimum of 25 percent of the unmitigated emissions exceeding 137 pounds per day must be offset by reducing emission from existing sources of pollution; otherwise, an EIR is required to fully address air quality impacts, emissions, mitigations, and project alternatives. The EIR must also address the reasons why the emission offsets should be waived based on potential overriding considerations (as permitted) and CEQA.

   Since Level "B" threshold will probably only be triggered by large General Plan amendments as opposed to development projects, it is important that programmatic mitigations be made part of the amendment so that the cumulative impacts of discretionary and nondiscretionary projects are mitigated.

4. If, after applying BAMM to the proposed project, the calculated emissions still cannot at least achieve a 20 percent reduction of Level "A" threshold and the City has determined that all feasible and best available mitigations have been applied, then the City may adopt a mitigated negative declaration.

Policy 2 (Report on Cumulative Air Quality Impacts)

The City Department of Planning and Community Development will submit a report to the Planning Commission for approval which identifies the cumulative transportation and air quality impacts of all General Plan amendments approved during the previous year in the Annual General Plan Status Report.

Implementation Strategy:

- Continue to improve the City's traffic model that tracks changes in land use by traffic analysis zone. Work with the AQMD in performing air emissions modeling on the cumulative land-use changes.

Policy 3 (Tracking Program for Cumulative Air Quality Impacts)

The City will establish an information program for decision makers that tracks the cumulative emissions of all approved projects so there is a relative understanding of the impacts of small and large projects as well as proposed projects.

Implementation Strategy:

- Work with the County and the AQMD to establish a uniform tracking program similar to the procedure discussed in Chapter VIII, Section "I."

Policy 4 (Uniform Air Quality Assessment Guidelines)

The City will support the development, refinement, and use of uniform air quality impact-assessment guidelines that will provide standard criteria for determining significant environmental effects, that will provide a uniform method of calculating project emissions, and that will provide standard mitigation measures to reduce air quality impacts.

Implementation Strategy:

- Work with the AQMD and other local planning agencies to implement standards that are uniform throughout the County and possibly our air basin as directed by the Air Pollution Control Board.

(Discussion: Coordination and cooperation are embraced by all, but we seldom achieve effective coordination and cooperation in government programs. Competitive and adversarial relationships between agencies have proven counterproductive. Working together for a common interest can multiply the resources available to accomplish air quality goals and preserve Federal and State transportation funds.)

OBJECTIVE 1B: TO COORDINATE LOCAL AIR QUALITY PROGRAMS WITH REGIONAL PROGRAMS AND THOSE OF NEIGHBORING JURISDICTIONS.

Policy 5 (Uniform Countywide Air Quality Programs)

The City will coordinate with other jurisdictions in the County to establish parallel air quality programs, application of CEQA, and implementation measures (trip-reduction ordinances, wood stove ordinance, and indirect source programs, etc.).

Implementation Strategy:

- Be involved in the rule development process by designating a City staff representative to work with the AQMD.

(Discussion: This policy seeks to promote a level playing field for all jurisdictions in the County. Also, large employers prefer uniform programs so compliance is the same at all employment sites.)

Policy 6 (Review Projects in Other Jurisdictions)

The City will notify and request comments from neighboring cities and the County and affected agencies during review of General Plan amendments involving two acres or more and other significant discretionary projects which may affect the adjoining jurisdiction.

Implementation Strategies:

- Create a positive environment that allows and encourages staff members to keep up with activities in neighboring jurisdictions and regional agencies. This should be accomplished by sending representatives to appropriate meetings, by contacting counterparts in other agencies when developing programs, and most important, by active participation in regional programs.

- The City should develop internal procedures to ensure that all affected jurisdictions and agencies are notified of development proposals in accordance with State law. When another agency notifies the City of a pending project, the City should examine air quality related issues such as the following:

  1. Congestion on roads (i.e., levels of service) from increased traffic caused by the project.

  2. Projected need for deficiency plans.

  3. Effects on the viability of transit and pedestrian-oriented developments (i.e., approval of a low-density development on the same transit corridor could reduce the ability of the transit provider to provide reasonable headway).

  4. Failure of the other jurisdiction to require the construction of a segment of a bikeway planned in the Regional Bikeway Plan.

5. Proposed circulation amendments that may restrict traffic flow to or from the City or that increase urban sprawl.

(Discussion: Transportation planning has emphasized the construction of new roadway capacity to reduce congestion and to meet the needs of development. Air quality legislation now mandates all transportation plans to consider air quality. This new emphasis requires land-use and transportation plans to create patterns of development and transportation infrastructure that reduce the need for new capacity and improves air quality.)

Policy 7 (Comprehensive Land Use, Transportation, and Air Quality Planning)

The City will continue to integrate land-use, transportation, and air quality planning to make the most efficient use of public resources and to carry out the policies and goals of this element.

Implementation Strategy:

- Future amendments to the General Plan Diagram will take into consideration the link between land use and circulation and its potential impacts on air quality.
- The City should establish precise zoning districts for property to reflect the long-term policies of the Air Quality, Circulation, and Land Use Elements and other policies of the General Plan.

Policy 8 (Regional and Local Plan Consistency)

All City submittal of projects to be included in regional transportation plans (Regional Transportation Improvement Plan [RTIP], County's Congestion Management Plan [CMP], etc.) should be consistent with the goals and policies of this General Plan Element.

Implementation Strategy:

- Analyze project submittal for consistency. Examples of inconsistent projects are a road-widening project that does not consider transit, bicycling, and pedestrian needs along the route or an intersection signalization project that does not involve the installation of signal actuators that can be activated by bicyclists or pedestrians.

(Discussion: This policy attempts to tie the regional transportation planning process back to the General Plan. The concept behind this policy is that projects funded by the RTIP and CMP process have a profound impact on where development will take place and what its composition will be.)

Policy 9 (Transit Planning)

The City should consult with transit providers to determine project impacts on long-range transit plans and ensure that impacts are mitigated.

Implementation Strategy:

- Consult with transit providers during the CEQA process to determine the impacts of development projects on the transit system and require developers to mitigate those impacts.

Policy 10 (Consolidation of Transit Services)

The City should continue to support the upgrading and consolidation of transit services within the metropolitan area to maximize the efficiency of transit services while minimizing the costs of transit services. This policy would also apply to small transit providers serving special groups like seniors. Consolidating these services can increase ridership per vehicle and reduce miles traveled.

Implementation Strategy:

- Encourage the Regional Transportation Planning Agency to include transit consolidation policies in the Regional Transportation Plan, which also calls for the upgrading of services to include comfortable transit stops, express services, and modern equipment to help increase ridership and reduced air emission from transit vehicles.

Policy 11 (Transit and Affordable Housing)

The City should work with the Housing Authority, transit providers, and developers to accommodate the construction of low-income housing developments that use transit-oriented and pedestrian-oriented design principles.

EDUCATION

(Discussion: Without the understanding and support of the general public, employers, and project developers, local air quality programs cannot be expected to achieve the desired results. Programs to educate the public on air quality issues are a vital component of a successful air quality program.)

OBJECTIVE 1C: TO HELP THE PUBLIC UNDERSTAND THE IMPACT OF INDIVIDUAL TRANSPORTATION AND LAND-USE DECISIONS ON AIR QUALITY.

Policy 12 (Air Quality Education)

The City should support and participate in the air quality education programs of the AQMD. The City should assist in educating developers and the public on the benefits of pedestrian and transit-friendly development.

Implementation Strategy: To be formed.

Policy 13 (New Transportation Technology)

The City should anticipate new technology in transportation so that opportunities are not foreclosed by relying on old technology.

Implementation Strategy:

- The City will monitor advancements in new technology regarding electric vehicles and cleaner burning combustion vehicles to ensure that future land-use and transportation systems can easily interface with the technology when it is available; and where reasonable, the City will pursue the development of joint-venture projects involving new technology.

PUBLIC FACILITIES/OPERATIONS

(Discussion: City government shall, as much as possible, take a leadership role in implementing employer-based, trip-reduction programs and fleet operator programs to reduce its own emissions and to provide a model for the private sector.)

OBJECTIVE 1D: CITY GOVERNMENT SHALL, AS MUCH AS POSSIBLE, OPERATE ITS FACILITIES TO SERVE AS A MODEL FOR THE PRIVATE SECTOR IN IMPLEMENTING AIR QUALITY PROGRAMS.

Policy 14 (Trip-Reduction Programs)

The City will, as much as possible, take the lead in implementing innovative employer-based, trip-reduction programs by ensuring that employment contracts negotiated with unions are flexible and allow workers to participate in programs that reduce commute trips.

Implementation Strategy:

- Work with AQMD transportation specialist in identifying affordable innovative employee-based, trip-reduction programs.

Policy 15 (Replacement of Conventional Fuel Vehicles)

The City should adopt a schedule to replace or convert conventional fuel vehicles with alternative fuel vehicles as rapidly as feasible based on available funds.

Policy 16 (Teleconferencing and Telework Centers)

The City should support the development of a teleconference center for the community and small telecommunication work centers in new development. This can be accomplished by working with the telephone company and other interested public and private agencies, developers, and hotel operators in developing a multi-user teleconferencing center and small telework centers.

Implementation Strategy:

- Study committee to be formed provided funding for planning and feasibility studies can be obtained from the AQMD.

B. LAND USE, TRANSPORTATION, AND AIR QUALITY

ISSUE:

MOTOR VEHICLE USE IS THE PRIMARY CAUSE OF EXCEEDING STATE OZONE STANDARDS IN MOST OF THE NORTHERN SACRAMENTO VALLEY. THE LAND-USE PATTERN AND TRANSPORTATION SYSTEM DEVELOPED OVER THE LAST 30 YEARS HAS LED TO EVER INCREASING VEHICLE TRIPS AND VEHICLE MILES TRAVELED. NEW WAYS OF DEVELOPING THE LAND AND MEETING OUR MOBILITY NEEDS ARE NECESSARY TO REVERSE THIS TREND AND TO IMPROVE OUR AIR QUALITY.

GOAL 2:

REDUCE MOTOR VEHICLE TRIPS AND VEHICLE MILES TRAVELED AND INCREASE AVERAGE VEHICLE RIDERSHIP (AVR).

(Discussion: Policies in this section are divided into two main categories: land use and transportation infrastructure. Land-use policies show a commitment to design future development in ways that encourage alternative modes of transportation and make the most efficient use of land available for development to reduce trips and miles traveled. Transportation infrastructure policies demonstrate the commitment to design and construct our transportation system in ways that promote the use of alternative transportation modes.)

LAND USE: LAND-USE PATTERN

(Discussion: The existing land-use pattern in the City's planning area could be more conducive to walking, bicycling, and transit use. This realization is reflected in the policies of this General Plan and the land use configurations of the General Plan Diagram. Redding cannot possibly match the success that cities like Portland, Oregon, and Davis, California, have had with bicycle and pedestrian systems because of lifestyle choices, extreme season temperatures, and topography, but the City can do more than it has. Most office developments have low employment densities and are often isolated from commercial services, causing people to drive to eat lunch or to complete errands. In some areas, high-density residential projects often have little if any commercial development nearby or discourage pedestrian access to commercial uses with land-use barriers, block walls, and cul-de-sac streets. The most common single-family lot size of 6,000 to 10,000 square feet leads to population densities [3.0 to 4.0 units per acre] too low to support frequent and direct transit

service. The predominant suburban development patterns force all local trips for shopping, recreation, and school as well as commute trips onto the arterial street system. This leads to ever wider, more congested arterial streets which in turn discourage people from walking even when the destination is just across the street.)

Policy 17 (Transit and Pedestrian-Oriented Design Guidelines)

The City shall make air quality and mobility prime considerations when reviewing any proposed change to the land-use pattern. Such consideration shall include, as much as possible, increased transit and pedestrian mobility. This step shall be part of the CEQA process and apply reasonable Best Available Mitigation Measures (BAMM) to projects that exceed the significance thresholds promulgated by the Air Quality Management District.

(Discussion: A comprehensive transit/pedestrian oriented program achieves air quality benefits by creating an environment conducive to the use of alternative modes of transportation. The California Air Resources Board [CARB] estimates that an overall reduction of 10 to 23 percent in regional vehicle travel can be achieved with a combination of land use, transit, and other mode shift strategies. Mixed-use and higher-density strategies can achieve 20 to 50 percent reduction in site specific travel and 4 to 11 percent regionally [CARB 1990]. The wide range of these estimates is due to a large number of factors that can affect travel mode choice at individual sites. The regional reductions are dependent on the extent of implementation throughout a jurisdiction. In addition, as these strategies are implemented throughout the County, potential reductions in site specific travel also become greater.)

Policy 18 (High Density and Transit)

The City shall, as much as possible, continue to plan high-density development in areas that can be fitted with a transit system.

Implementation Strategy:

- Continue to designate high- and medium-density housing at appropriate sites during General Plan updates and developer-initiated General Plan amendments.
- Encourage developers to take advantage of density bonus provisions of the Zoning Ordinance for projects located around transit hubs or nodes on existing or planned transit corridors.

(Discussion: The Institute of Traffic Engineers [ITE] Trip Generation Manual assigns approximately 40 percent fewer trips to apartments and condominiums than it does for single-family housing. To obtain the greatest trip-reduction potential, high-density housing should be oriented to take advantage of public transportation and commercial services within walking distance. Strategies to increase density must be pursued with caution. Apartment projects adjacent to existing residential development frequently arouse fierce neighborhood opposition. Although traffic generated per dwelling unit is significantly less, the greater number of units may still have adverse traffic impacts. The ability of public facilities to absorb increased demand for services must also be considered.)

Policy 19 (Mixed Use—Bicyclists and Pedestrians)

The City shall continue to encourage mixed-use developments near employment centers that provide commercial services such as day-care centers, restaurants, banks, and stores.

Implementation Strategy:

- Maintain the "Mixed Use Village" overlay within the General Plan, which provides significant incentives for developments that permit bicyclists and pedestrians to safely travel between uses and their homes.

Tailor the allowed uses to those best suited for a pedestrian environment and designate mixed-use areas on the land-use plan during General Plan updates.

- Adopt zoning regulations that permit upper story residential uses in neighborhood shopping areas. These upper story uses can include residential and office.

Policy 20 (Funding for Pedestrian and Bicyclist Mobility)

The City should provide funding opportunities and options for the development of pedestrian and bicyclist corridor construction.

Implementation Strategy:

- The City should authorize park development fees to be used to develop pedestrian and bicycle landscape corridors between existing commercial developments. This funding could be augmented by other funding sources. Funding could also come from annual assessment fees provided property owners approve of the formation of a landscape maintenance district pursuant to the 1972 Landscape and Lighting Act or through the use of an "in-lieu" fee system. The corridors could incorporate seating, decorative street furniture and paving material, portable fast-food carts for licensed vendors, newspaper and magazine stands, and some shaded area with drinking fountain and possibly a water fountain incorporated into the landscaping.

(Discussion: Nationwide, 38 percent of all vehicle trips are for shopping or personal business and about 60 percent of these trips are between one-half mile and five miles in length. By providing the most frequently needed products and services close to residences and by providing direct, safe, and interesting pedestrian or bicycle routes to the commercial area, travel can be reduced. Surveys conducted in five US cities indicated that 70 percent of people surveyed would be willing to walk or bicycle for some personal business and shopping trips if the trips were reduced to one-half mile in length and bicycle paths and pedestrian walkways were provided [CEC 1992].)

Policy 21 (Parking and Multi-modal Transfer Sites)

The City will work with the Redding Area Bus Authority in planning multi-modal transfer sites that incorporate auto parking areas, bike parking, transit, pedestrian and bicycle paths, and park and ride pick-up points.

Implementation Strategy:

Identify locations where transportation systems converge and designate the area as a potential multi-modal transfer site in the General Plan.

LAND USE: COMPACT DEVELOPMENT

(Discussion: Sprawling, low-density development and discontiguous development discourages the use of alternative transportation modes and increases travel distances. Infrastructure costs and environmental impacts are less when development is more compact.)

OBJECTIVE 2A: TO PLAN DEVELOPMENT IN A WAY THAT MAKES THE MOST EFFICIENT USE OF THE LAND AND THEREBY CAUSES THE LEAST POSSIBLE IMPACTS TO THE ENVIRONMENT.

Policy 22 (Leap-Frog Development)

The City shall continue to encourage compact infill development.

Implementation Strategy:

Support infill projects by ensuring that leap-frog projects pay the full cost of the extended infrastructure and the pro rata share of the cost of increased capacity of sewer, water, electricity, and circulation. Encourage growth to occur in and around activity centers, transportation nodes, under-utilized infrastructure systems, and redevelopment areas.

Policy 23 (Higher Densities)

The City shall consider redesignating vacant lands suitable for higher densities and transit/pedestrian-oriented developments during future General Plan updates and periodic reviews.

Policy 24 (Single-Family and Mixed-Use Conflicts)

The City shall encourage projects within urban areas that will improve the effectiveness of the transit system and will not adversely affect existing single-family development.

Implementation Strategy:

Encourage commercial uses that are complimentary to urban employment centers and residential areas. Strategically locate high-density development so that it doesn't conflict with single-family uses and so that it provides good transit access. Design pedestrian corridors to serve as buffers between mixed uses.

Policy 25 (Sphere of Influence)

The City will work with the Local Agency Formation Commission, Cities of Anderson, Shasta Lake, and the County in establishing a hard edge urban limit line for the boundary of the metropolitan area of the County and commitment to providing public services only within the urban areas.

Implementation Strategy:

- City shall continue its policy of designating water and sewer service areas that closely correspond to the land-use plan.
- Ensure that long-range infrastructure development plans accommodate growth in the desired areas.
- Expand public services incrementally to serve contiguous development and encourage the development of services to serve urban densities as opposed to rural fringe areas of the City.

TRANSPORTATION INFRASTRUCTURE: BICYCLE, PEDESTRIAN, AND TRANSIT

(Discussion: The transportation infrastructure developed in the metropolitan area of the County supports the automobile at the expense of other modes of transportation. Placing new emphasis on transit, bicycling, and pedestrian infrastructure can relieve pressure from the traditional roadway system and improve air quality.)

Policy 26 (Pedestrian, Bicycle, and Transit Funding)

The City should ensure that State and Federal funds earmarked for bicycle and transit improvements are used for those purposes and vigorously pursue funds for new bicycle and transit improvements.

Policy 27 (Bus Turnouts and Shelters)

As a condition of project approval, the City shall require dedication of land for bus turnouts and shelters at sites deemed appropriate and necessary.

Policy 28 (Bikeway and Pedestrian Plan)

The City shall ensure that the Regional Bikeway Plan and the City's Comprehensive Bikeway Plan include a comprehensive system of bikeways and pedestrian paths which is planned and constructed in accordance with the adopted plan, based on analysis of existing and future use by the area to be served.

Implementation Strategy:

To maximize bicycle use, the following policies and actions should be included in street design standards, subdivision ordinances, zoning ordinances, and the Circulation Element of the General Plan:

- The bikeways should be part of a network that connects major destination points within the community. The Sacramento River Trail, along with its planned extension, can serve as the arterial for a network of feeder bikeways and pedestrian trails.
- Provide separate bike paths in areas where motor vehicle speed or volume make on-street bike lanes unsafe or unpleasant to use.
- Provide automatic traffic signal actuators embedded in the roadway or provide manual signal actuators where cyclists may reach them without leaving the roadway.
- Provide bicycle paths along greenbelts, linear parks, public easements, and drainage reserved as open space.
- Use grant and other funds to provide bicycle and pedestrian bridge crossings for creeks and the Sacramento River.
- Provide adequate paved shoulder on arterials and collectors to keep cyclists and motorists separate.
- The City should require developers to provide bicycle racks or enclosed and locked bicycle storage at major activity centers and office and commercial establishments to serve patrons and employees.
- Do not allow on-street parking on roadways designated with bike lanes whenever possible.
- Increase bicycle use by requiring projects to include the provision for bike racks or enclosed and locked bicycle storage at major activity centers and office and commercial establishments.
- The foregoing provisions shall not be applied to projects if there is no likelihood of need, use, or forecasted use by pedestrians or bicyclists.

C. FUGITIVE DUST/PM_{10}

ISSUE:

THE LEVELS OF PM_{10} (DUST) AND VISIBILITY REDUCING PARTICULATES IN THE CITY'S AIR BASIN FREQUENTLY EXCEED STATE STANDARDS. CONTROL EFFORTS FOR SOURCES UNDER THE JURISDICTION OF CITIES AND COUNTIES CAN SIGNIFICANTLY REDUCE THESE EMISSIONS.

GOAL 3:

REDUCE PARTICULATE EMISSIONS FROM SOURCES UNDER THE JURISDICTION OF THE CITY.

Policy 29 (Reduce Particulates)

The City will require measures to reduce particulate emissions from construction, grading, and demolition to the maximum extent feasible.

Policy 30 (Unpaved Roads and Alleys)

The City will develop a priority schedule for paving roads and alleys based on availability of funds, grants, and cooperation of adjoining property owners.

D. WOODBURNING

ISSUE:

RESIDENTIAL WOOD BURNING CONTRIBUTES TO WINTER CARBON MONOXIDE AND PM_{10} EMISSIONS AND EXCEEDING STATE STANDARDS. FIREPLACE AND WOOD STOVE TECHNOLOGY AND PRODUCTS ARE READILY AVAILABLE THAT CAN SIGNIFICANTLY REDUCE THESE EMISSIONS AT A REASONABLE COST.

GOAL 4:

MINIMIZE AIR POLLUTANT EMISSIONS FROM WOOD BURNING FIREPLACES AND APPLIANCES.

Policy 31 (Phase 2 Wood Stoves)

The City will only allow developers to install low-emitting, Environmental Protection Agency (EPA) certified Phase 2 or more stringent fireplace inserts and/or wood stoves or pellet stoves.

Implementation Strategy:

- Adopt a local ordinance, promulgated by the AQMD, requiring new wood burning appliances to be EPA certified. Participate in a public education campaign.

Policy 32 (Green or Wet Wood)

The City should encourage the AQMD to annually advertise the importance of burning only seasoned dry wood.

Implementation Strategy:

- AQMD should utilize radio billboard advertising seasonally to remind and educate residents of the importance of burning only seasoned dry wood as a means to reduce emissions and to educate consumers about the financial and environmental benefits of replacing their old wood heating devices with Phase 2 stoves and fireplace inserts. This program should be coordinated with local wood stove retailers who benefit from such sales.

Policy 33 (Changeout)

The City should encourage the AQMD to adopt a countywide rule that requires a changeout for existing wood heating devices at the time of change of property ownership. The rule should be proposed if the County continues to exceed State PM_{10} standards. The community needs a minimum of two years lead time before this rule takes effect.

Implementation Strategy:

- Work with the AQMD, the Shasta Board of Realtors, and the Builders Exchange in developing such a rule when needed.

VI. AIR QUALITY ANALYSIS AND BEST AVAILABLE MITIGATION MEASURES

The following guide to mitigating motor vehicle-related impacts for proposed residential, commercial, and industrial projects was prepared by the Shasta County Air Quality Maintenance District (AQMD) as a recommended approach to meeting the goals of the City's Air Quality Element. The California Environmental Quality Act (CEQA) states that a public agency should not approve a project unless feasible alternatives are considered and mitigation measures incorporated that would substantially lessen any significant effects on the environment (unless overriding considerations are made pursuant to CEQA Guidelines Section 15093).

If the impacts cannot be mitigated below the significance threshold, they must nevertheless be reduced. CEQA describes various types of mitigation as follows:

- Avoiding impacts altogether by not taking a certain action or part of an action
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- Rectifying impacts by repairing, rehabilitating, or restoring the impacted environment
- Reducing or eliminating the impacts over time by preservation and maintenance operations during the life of the action
- Compensating for the impacts by replacing or providing substitute resources
- Reduce or eliminate impacts by adopting an environmentally superior alternative.

Section 15041 (a) of the State CEQA guidelines states that the lead agency has the authority to require changes in any or all activities involved in a project in order to lessen or avoid significant effects on the environment. The AQMD, as a local responsible CEQA agency, has a duty to recommend mitigation to lessen air quality impacts.

In addition to CEQA requirements, mitigation of impacts is necessary to achieve the goals of the City's Air Quality Element and the State's ambient air quality standards. Specifically, all future sources of emissions, including those associated with land development, must be mitigated to the greatest extent possible to achieve ambient air quality standards expeditiously.

A. CATEGORIES OF MITIGATION MEASURES

The BAMM of this chapter are offered as a guide to stimulate the thinking of developers and the City regarding the need to take advantage of existing and built-in project mitigations which would reduce the need to apply more exotic and expensive emission-reducing mitigations.

The AQMD-recommended sample mitigation measures are divided into two categories: **Standard Mitigation Measures (SMM)** and **Best Available Mitigation Measures (BAMM)**. It should be reiterated that the sample mitigation measures of this chapter are only provided to demonstrate the procedure for applying SMM and BAMM. The AQMD recommends that SMM be applied to **all** projects regardless of the extent of air quality impacts in order to reduce cumulative impacts. The recommended BAMM or equally effective BAMM of the local agency should be applied as appropriate when a project has an impact on air quality above the specified impact threshold levels.

All projects contribute to cumulative air quality impacts and should employ the appropriate SMM at a minimum. (See SMM list below.) Cumulative impacts of projects such as convenience markets, small office developments, residential subdivisions of 100 or less, etc., must be mitigated even where a Negative Declaration is deemed the appropriate environmental document. Not only will this approach reduce overall

emissions caused by cumulative impacts, but it will also reduce the likelihood that large projects will need to carry a larger burden of mitigation. Assume for example that several small projects are approved without mitigation. A larger project may subsequently be required to mitigate for cumulative impact regardless of shared responsibility.

B. PROJECT ANALYSIS

The BAMM apply to any residential, commercial, or industrial project which exceeds the above significance thresholds. Determining the mitigation measures that may apply to a specific project requires first operating the URBEMIS model. This model is a California Air Resources Board approved computer program that is used to quantify emissions resulting from increased automobile traffic from new or modified land uses. The program considers the number of vehicle trips generated, vehicle miles traveled for each type of trip taken, and the associated air emissions.

The computer model shall be used by the planning department at the beginning stages of a land-use project when the initial study is conducted to determine the air quality impacts on the environment. More advanced URBEMIS models may be used if approved by the State Air Resources Board and accepted by the AQMD. The defaults of the model shall be modified as noted in the conclusion of this chapter. These defaults shall be used unless other defaults are authorized by the AQMD. (The flow chart at the conclusion of this chapter illustrates the stages of air quality analysis for projects.) Once the impacts have been identified using the URBEMIS computer model, the appropriate level of BAMM are applied to the project. The BAMM are applied at specific threshold levels, which are the same for commercial/industrial and residential levels.

The following AQMD's thresholds for analysis and mitigation are consistent with the New Source Review Rule 2:1 which the Air Pollution Control Board adopted to comply with the California Clean Air Act:

Threshold for BAMM

LEVEL "A"
1. 25 pounds per day of oxides of nitrogen
2. 25 pounds per day of reactive organic gases
3. 80 pounds per day of inhalable particulate matter (PM_{10})

Threshold for Additional Air Quality Analysis and Mitigation Measures

LEVEL "B"
1. 137 pounds per day of oxides of nitrogen
2. 137 pounds per day of reactive organic gases
3. 137 pounds per day of inhalable particulate matter (PM_{10})

C. STEPS FOR AIR QUALITY ANALYSIS AND PROJECT MITIGATION

1. Run the URBEMIS computer model prior to or at the time the initial environmental study is conducted to determine the total unmitigated project emissions related to motor vehicle trip generation.

2. If a project has emissions less than the Level "A" threshold noted above, only feasible Standard Mitigation Measures (SMM) are required.

3. If a project has emissions greater than the threshold Level "A" noted above, apply all feasible mitigation measures for construction and/or operation from the lists of recommended Standard Mitigation Measures and appropriate Best Available Mitigation Measures as determined by the City.

4. For large projects to be developed in phases, each phase shall be treated as a separate project in terms of providing emission reduction as noted in Table "I" of this chapter. The requirement for an EIR and offsets is still applicable if all the phases exceed Level "B" threshold.

5. Large, phased projects should receive credit for reduced vehicle emissions based on the regional market they serve; however, the project proponent must submit traffic data that documents the reduced VMT

for the regional area relative to the 20-year growth forecast of the area. The forecasted traffic data must consider the growth of the area with and without the project.

6. Only feasible mitigation measures listed and Level "B" of this section shall be applied if project emissions exceed the Level "B" threshold. To determine the degree of emission reduction to be mitigated, the following additional analyses should be completed:

   a. Calculate emission reductions available from each mitigation measure by multiplying the percent efficiency of each mitigation measure by the total unmitigated project emissions. (Reference Emission Tables for the efficiency of each mitigation measure.)

      If project-specific efficiency is unknown, use the mid-range value in the efficiency range given in the Table unless justification is provided by the applicant to use a higher efficiency. The Planning Department, in consultation with the AQMD, shall determine the efficiency of each mitigation measure.

   b. To determine mitigated project emissions, subtract total emission reduction from total unmitigated project emissions.

   c. If the project's impacts are reduced below the 137 pound per day threshold for oxides of nitrogen and reactive organic gases and/or the 80 pound per day threshold for inhalable particulate matter (PM_{10}), a Mitigated Negative Declaration (MND) may be appropriate if other impacts are not anticipated.

   d. Determine if the project's emissions still exceed the above threshold of significance.

   e. If the project emissions remain above the 137 pound per day threshold, emission offsets are required. A minimum of 25% of the unmitigated emissions exceeding the 137 pound per day threshold must be offset by reducing emissions from existing sources of air pollution. The Shasta County AQMD should be contacted to determine appropriate offsets. If the project emissions still exceed the above threshold with emission offsets credited, an Environmental Impact Report (EIR) should be prepared, focusing on air quality, traffic impacts, and project alternatives. (See attached sample calculation.)

   f. If air quality impacts are not significant, then a Negative Declaration may be appropriate if other impacts do not exist.

D. RECOMMENDED STANDARD MITIGATION MEASURES (SMM) APPLICABLE TO ALL PROJECTS

1. Provide energy-efficient process systems, such as water heaters, furnaces, and boiler units.

2. Apply nontoxic soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more).

3. Reestablish ground cover on the construction site through seeding and watering prior to final occupancy.

4. All grading operations of a project shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour as directed by the AQMD.

5. All new wood burning devices shall be EPA Phase II certified.

6. Streets should be designed to maximize pedestrian access to transit stops.

7. Large residential, commercial, and industrial projects should include bus shelters at transit access points.

8. Provide temporary traffic control as appropriate during all phases of construction to improve traffic flow (e.g. flag person).

9. Schedule construction activities that affect traffic flow to off-peak hours.

10. Water active construction sites at least twice daily as directed by the Public Works Department.

11. All truck hauling dirt, sand, soil, or other loose materials should be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.

12. Sweep streets at the end of the day if visible soil materials are carried onto adjacent public paved roads (recommend water sweeper with reclaimed water).

13. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

Note: Additional mitigations may be obtained from the CEQA Air Quality Handbook prepared by the South Coast Air Quality Management District, Diamond Bar, California (April 1993). Copies are available for review in the Redding Department of Planning and Community Development.

E. RESIDENTIAL PROJECTS: RECOMMENDED BEST AVAILABLE MITIGATION MEASURES (BAMM)

Level "A" Measures

1. Implement all applicable Standard Mitigation Measures.

2. Contribute to traffic-flow improvements that reduce emissions and are not growth-inducing (e.g., right-of-way, capital improvements, etc.).

3. Install an electrical outlet at the front and back of all residential units for electrical yard equipment.

Level "B" Measures

1. Implement all applicable Standard Mitigation Measures and Level "A" Mitigation Measures.

2. Construct, contribute, or dedicate land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes in accordance with an adopted citywide or countywide plan.

3. Synchronize traffic signals along streets impacted by development.

4. Construct on-site and off-site bus turnouts, passenger benches, and shelters.

5. Provide for pedestrian access between bus service and major points within the development.

6. Construct off-site pedestrian facility improvements such as overpasses and wider sidewalks.

7. Include neighborhood retail sales and services within or adjacent to residential subdivisions. (Note, this provision cannot be applied until the City's Land Use Element has been revised to allow mixed use.)

8. Orient building structures and install landscape that takes advantage of passive solar design principles.

9. Install solar water heaters for at least 25 percent of the residential units in the development.

10. Incorporate mixed use development in order to achieve a balance of commercial, employment, and housing options within the project site. (Note, this provision cannot be applied until the City's Land Use Element has been revised to allow mixed use.)

11. Provide neighborhood park(s) or other recreational options such as trails within development to minimize vehicle travel to other parks or commercial areas.

12. Provide densities of six units or greater to support transit.

F. COMMERCIAL/INDUSTRIAL PROJECTS: RECOMMENDED BEST AVAILABLE MITIGATION MEASURES (BAMM)

Level "A" Measures

1. Implement all applicable Standard Mitigation Measures.
2. Contribute to traffic-flow improvements that are not growth-inducing (e.g., right-of-way, capital improvements, etc.).
3. Provide preferential parking spaces for carpools and vanpools and provide 7-foot 2-inch minimum vertical clearance in parking facilities for vanpool access.

Level "B" Measures

1. Implement all applicable Standard Mitigation Measures and Level "A" Mitigation Measures.
2. Telecommuting programs, alternate work schedules, and guaranteed ride home programs shall be established as appropriate.
3. Provide for transit-use incentives such as subsidized transit passes and accommodation of unusual work schedules to encourage transit use.
4. Convert fleet vehicles to clean-burning fuel as appropriate.
5. Shower/locker facilities shall be provided when appropriate for bicycling and pedestrian commuters.
6. Construct off-site bicycle and pedestrian facility improvements such as trails linking the facility to designated pedestrian/bicycle commuting routes.
7. Provide on-site services such as cafeterias, food vending machines, automatic tellers, etc., as appropriate.
8. Contribute to construction of off-site park-n-ride lots.
9. Provide on-site child care and after-school facilities or contribute to off-site development within walking distance.
10. Construct on-site pedestrian facility improvements such as walk paths and building access which is physically separated from street and parking lot traffic.
11. Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days, such as 9/80, 4/40 or 3/36.
12. Construct on-site and off-site bus turnouts, passenger benches, or shelters.
13. Provide adequate bicycle storage/parking facilities.
14. Implement alternative transportation program such as Caltrans rideshare.

RESIDENTIAL PROJECTS
Sample Mitigation Measure Efficiencies for Controlling
Indirect Mobile Source Emissions

Mitigation Measures	Emission Reduction Efficiency		
	ROG	NO_x	PM_{10}
▸ Construct on-site or off-site bus turnouts, passenger benches, and shelters	0.2-1.9%	0.2-2.5%	0.2-2.5%
▸ Construct off-site pedestrian facility improvements such as overpasses and wider sidewalks	0.1-0.3%	0.1-0.4%	0.1-0.4%
▸ Contribute to regional transit system improvements (e.g., right-of-way, capital improvements, etc.)	4.0-8.0%	4.0-8.0%	4.0-8.0%
▸ Synchronize traffic lights on existing streets impacted by development	4.0-8.0%	4.0-8.0%	4.0-8.0%
▸ Construct, contribute, or dedicate land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes	0.1-0.6%	0.1-0.8%	0.1-0.8%
▸ Include retail services within or adjacent to residential subdivisions	1.0-4.0%	1.3-6.0%	1.3-6.0%
▸ Provide for pedestrian access between bus service and major points within the development (e.g.,sidewalks, paths, walkways)	0.1-3.0%	0.1-3.0%	0.1-3.0%
▸ Orient buildings for passive solar design	1.0-2.0%	1.0-3.0%	1.0-5.5%
▸ Include neighborhood telecommunication or telework center within residential subdivision	1.0-5.0%	1.0-5.0%	1.0-5.0%
▸ Include residential development within commercial core area or business district	4.0-13.0%	4.0-13.0%	4.0-13.0%

NOTE: The Redding Planning Department, in consultation with AQMD, will determine the degree of efficiency for the mitigations of this table, but generally, the average of the range shall be used.

COMMERCIAL/INDUSTRIAL PROJECTS

Sample Mitigation Measure Efficiencies for Controlling Indirect Mobile Source Emissions

Mitigation Measures	Emission Reduction Efficiency		
	ROG	NO_x	PM_{10}
▸ Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days	1.0-20.0%	1.0-40.0%	1.0-40.0%
▸ Establish telecommuting programs, alternate work schedules, and guaranteed ride home programs	0.1-1.6%	0.1-2.1%	0.1-2.1%
▸ Provide on-site child care and after-school facilities or contribute to off-site development within walking distance	0.1%	0.1-0.2%	0.1-0.2%
▸ Construct on-site or off-site bus turnouts, passenger benches, or shelters	0.1-1.0%	0.1-1.3%	0.1-1.3%
▸ Provide on-site employee services such as cafeterias and ATMs	0.2-3.4%	0.3-4.5%	0.3-4.5%
▸ Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access	0.1-1.0%	0.1-1.3%	0.1-1.3%
▸ Establish alternative transportation program through Caltrans rideshare	0.1-1.6%	0.1-1.6%	0.1-1.6%
▸ Use low-emission fleet vehicles	See AQMD	See AQMD	See AQMD
▸ Provide for transit-use incentives, such as subsidized transit passes and accommodation of unusual work schedules to allow for transit stops	0.4-1.5%	0.4-1.5%	0.4-1.5%
▸ Contribute to traffic- flow improvements that are not growth inducing	4.0-8.0%	0.4-8.0%	0.4-8.0%
▸ Provide shuttles to major transit stations and multimodal centers	0.1-0.3%	0.1-0.5%	0.1-0.5%
▸ Include residential units with commercial project	3.1-13.7%	4.0-18.0%	4.0-18.0%
▸ Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots	0.1%	0.1-0.2%	0.1-0.2%
▸ Any two of the following:			
- Construct off-site bicycle facility improvements such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements such as bicycle paths	0.2-2.4%	0.3-3.2%	0.3-3.2%
- Include bicycle parking facilities such as bicycle lockers and racks	see above	see above	see above
- Include showers for bicycling employees' use	see above	see above	see above
▸ Any two of the following:			
- Construct off-site pedestrian facility improvements such as overpasses, wider sidewalks	0.2-1.2%	0.2-1.6%	0.2-1.6%
- Construct on-site pedestrian facility such as a building access physically separated from the street and parking lot traffic and walk paths	see above	see above	see above
- Include showers for pedestrian employees' use	see above	see above	see above
▸ Provide video conferencing facilities	5.0-29.0%	5.0-29.0%	5.0-29.0%

NOTE: The Redding Planning Department, in consultation with AQMD, will determine the degree of efficiency for the mitigations of this table, but generally, the average of the two ranges shall be used.

G. URBEMIS COMPUTER PROGRAM ASSUMPTIONS AND DEFAULTS

Estimates of emissions generated by the traffic of a project shall be accomplished by using the latest version of a computer program called URBEMIS. This model contains default values for much of the information needed to calculate emissions. The Air Quality Management District will provide documentation on the latest assumptions and defaults to be used. This documentation shall consider updated information concerning the following:

1. *Project Year.* Select the year nearest to the initial project phase scheduled completion year. If this date is indeterminate, use the year nearest to the date of analysis.

2. *Vehicle Fleet Mix.* Use URBEMIS default values unless project has unusual characteristics and data is available to modify the mix characteristics.

3. *Ambient Temperature.* As specified by the AQMD.

4. *Trip Speeds.* Use URBEMIS default values unless project has unusual characteristics and data is available to modify the speeds. Note, the average trip speeds must consider the time delay at intersection stops and acceleration and deceleration times. A typical trip speed for a residential project is 30 to 35 MPH.

5. *Project Area.* Use RURAL as area selection since this designation more closely corresponds to Shasta County than the other selections available.

6. *Trip Lengths.* Use URBEMIS default values unless other values have been approved by the Air Pollution Control Officer as a result of special traffic surveys or studies.

7. *Percent of Cold Starts and Percent of Trip Types.* Same as above.

8. *Percent PM_{10} and Percent Sulfur in Fuel.* Same as above.

9. *Trip Rates.* The model lists 41 ITE default trip rates for various types of land use. Trips should be modified according to the City's traffic model for the particular trip zone. In any case, the City shall approve the trip rate used.

H. SAMPLE CALCULATION OF EMISSION REDUCTION FROM APPLICATION OF BEST AVAILABLE MITIGATION MEASURES (BAMM)

Project: 500 Single Family Residences
1 Community Shopping Center

The reader should understand that this example, as well as those on page 48, is only provided to illustrate the methodology. The emissions produced by these sample projects should not be interpreted as the level of emissions that would be calculated using the latest approved URBEMIS model. It is also important to understand that each emission reduction factor to be applied must be documented and justified.

1. Total unmitigated project emissions from URBEMIS computer model:

   95.9 #/day TOG
   143.2 #/day NO_x
   18.2 #/day PM_{10}

2. Do project unmitigated emissions exceed Level "A" threshold of 25 #/day NO_x, 25 #/day ROG, or 80 #/day PM_{10}? Yes. (Assume reactive organic gases [ROG] are equivalent to total organic gases [TOG]. Apply all feasible Level "A" measures for both residential and commercial/industrial projects since this project has features of both types of development.

3. Do project unmitigated emissions exceed Level "B" threshold of 137 #/day of the above pollutants? Yes. Apply all feasible Level "B" measures for both residential and commercial/industrial projects since this project has features of both types of development.

4. The following mitigation measures and associated average emission reductions were selected for this project:

   a. Synchronize traffic lights on streets near development:

      TOG Reduction = (95.9 #/day)(.06) = 5.8 #/day
      NO_x Reduction = (143.2 #/day)(.06) = 8.6 #/day
      PM_{10} Reduction = (18.2 #/day)(.06) = 1.1 #/day

   b. Include retail service adjacent to subdivision:

      TOG Reduction = (95.9 #/day)(.025) = 2.4 #/day
      NO_x Reduction = (143.2 #/day)(.0365) = 5.2 #/day
      PM_{10} Reduction = (18.2 #/day)(.0365) = 0.66 #/day

   c. Construct on-site bus turnouts and shelters:

      TOG Reduction = (95.9 #/day)(.0105) = 1.0 #/day
      NO_x Reduction = (143.2 #/day)(.014) = 2.0 #/day
      PM_{10} Reduction = (18.2 #/day)(.014) = 0.2 #/day

5. Mitigated project emissions are determined by subtracting total reductions from unmitigated project emissions:

   TOG Emissions = 95.9 - 5.8 - 2.4 - 1.0 #/day = 86.7 #/day
   NO_x Emissions = 143.2 - 8.6 - 5.2 - 2.0 #/day = 127.4 #/day
   PM_{10} Emissions = 18.2 - 1.1 - 0.66 - 0.2 #/day = 16.2 #/day

6. Determine if project emissions exceed the 137 #/day emission threshold where emission offsets are required. No. All emissions are below the significance level with applied mitigation. Therefore, a Mitigated Negative Declaration (MND) is appropriate.

I. SAMPLE LIST OF PROJECTS AND ASSOCIATED AIR POLLUTION MITIGATIONS USING AIR QUALITY ELEMENT PROCEDURES

Project Type	Emissions Produced			Does Use Exceed Level "A" Emission Threshold			Does Use Exceed Level "B" Emission Threshold			Suggested Mitigation
	TOG	NO_x	PM_{10}	TOG (25lb/day)	NO_x (25lb/day)	PM_{10} (80lb/day)	TOG (137lb/day)	NO_x (137lb/day)	PM_{10} (137lb/day)	
Single-family subdivision (100 units)	12.5	26.1	3.0	No	Yes	No	No	No	No	1. Standard Mitigation Measures 2. Construct on-site bus bench, passenger turnout, or shelter (1.4% reduction)
Single-family subdivision (20 units)	3.0	6.1	.7	No	No	No	No	No	No	1. Standard Mitigation Measures
Manufacturing building (20,000 sq ft)	1.3	2.6	5.0	No	No	No	No	No	No	1. Standard Mitigation Measures
Manufacturing building (4,000 sq ft)	.3	.5	1.0	No	No	No	No	No	No	1. Standard Mitigation Measures
Contractor storage yard (1,000 sq ft building)	.1	.2	.5	No	No	No	No	No	No	1. Standard Mitigation Measures
Small neighborhood shopping center (20,000 sq ft)	37.8	62.6	25.3	Yes	Yes	No	No	No	No	1. Standard Mitigation Measures 2. Construct on-site bus benches and shelter (1.4% reduction) 3. Provide on-site restaurant (built into project's design) (2.4% reduction) 4. Provide on-site shopping for employees (2.4% reduction) 5. Provide shopping adjacent to residential neighborhood (11% reduction) 6. Provide on-site bike rack (1.5% reduction)

Total Reduction for Small Neighborhood Shopping Center = 20.1% (30.2 TOG, 50.1 NO_x, 20.3 PM_{10}). Since suggested mitigations do not reduce the emissions below Level "A" thresholds for the shopping center, the City must make a finding that all feasible best available mitigations have been applied. This finding would be made part of a mitigated negative declaration. For large projects which are developed over time, each phase of the project shall be treated as a single project in terms of meeting the 20 percent and 25 percent emission reduction standard of this table.

In most cases, Level "B" threshold will only be triggered by large General Plan amendments as opposed to single development projects; therefore, it is important that programmatic mitigations be incorporated in the amendment so that the cumulative effects of discretionary and nondiscretionary projects are addressed.

NOTES:

1. If use does not exceed Level "A" threshold, then use must at least reduce emissions by 20 percent by applying BAMM.
2. If, after applying BAMM, use still exceeds Level "A" threshold, then use must at least achieve a minimum emission reduction of 20 percent with BAMM.
3. If, after applying BAMM, use still exceeds Level "B" threshold, then a minimum of 25 percent of unmitigated emissions exceeding 137 pounds per day must be offset by reducing emissions from existing sources of pollution; otherwise, an EIR is required which must address air quality impacts, mitigations, and project alternatives as well as the basis for adopting any proposed "finding of overriding consideration" pursuant to the California Environmental Quality Act.

J. SOURCES FOR OTHER STANDARD MITIGATION MEASURES (SMM) AND BEST AVAILABLE MITIGATION MEASURES (BAMM)

1. Placer County Air Pollution Control District, "Menu of Mitigation Measures" (9/93)
2. San Joaquin Valley Unified Air Pollution Control District, "Model Air Quality Element - Admin. Draft" (8-19-93)
3. South Coast Air Quality Management District, "1992 Revision of CEQA Air Quality Handbook - Chapter 11"
4. South Coast Air Quality Management District, "1992 Revision of CEQA Air Quality Handbook - Appendix 11"

VII. TRACKING CUMULATIVE EMISSIONS OF ALL APPROVED PROJECTS

Since the County Air Quality Attainment Plan and this element only "strive" to achieve an annual reduction in emissions by applying Best Available Mitigation Measures (BAMM), not all project emissions will be mitigated. Although the California Clean Air Act permits this approach, the County and its cities should at least track the cumulative contribution of unmitigated emissions for all projects. This will enable decision makers to see how much more unmitigated emission is being added to the cumulative emissions of all approved projects relative to a proposed project. In a way, this measure can serve as a gauge for any future adjustments in the mitigations of the Air Quality Element.

The most obvious gauge to use for annual cumulative impacts is the threshold level of the "New Source Review Rule," which is 25 tons/year or 137 lbs/day. This threshold coincides with Level "B" of the Air Quality Element in determining when an EIR and offsets are needed (see Chapter VII, Section "B"). Basically, the threshold serves as a level of significance for large and cumulative effects of several small projects. The reader is reminded that large projects must address the impacts of exceeding Level "B," but small projects pending consideration of approval should only be examined relative to their contribution to Level "B" threshold as a matter of information.

The annual cumulative contribution of emissions from vehicles and wood heating devices, including fireplaces, should also be traced in accordance with the calculations of this chapter.

The information from the following table should be made part of the initial environmental study for each proposed project. At the end of the year, a report of cumulative emissions for that calendar year should be submitted to the Air Quality Management District (AQMD), the Planning Commission, and City Council as a matter of information.

Table __

AIR QUALITY OZONE AND PM_{10} TRACKING PROGRAM FOR PROPOSED AND APPROVED PROJECTS (Based on Calendar Year)

1.	Vehicle emissions of **proposed** project as quantified by the air quality URBEMIS computer model.	( )
2.	Vehicle emission reductions of proposed project based on proposed mitigations.	( )
3.	Difference in emissions between No. 1 and No. 2 for proposed project.	( )
4.	Annual cumulative emissions of all **approved** projects.	( )
5.	Add No. 3 and No. 4.	( )
6.	Significant project threshold of Air Quality Management District (Level "B").	(25 tons/year)

7. Difference in emissions between No. 5 and No. 6 is the amount of emissions that Cities and County must offset through emission reductions or offsets being applied to new development or modified and/or existing businesses. ( )

As noted above, the Level "B" threshold is the same threshold used in the permitting process of the AQMD for stationary sources of pollution from individual businesses and manufacturing plants. The permit requirements, including emission offsets for Level "B" exceedances, apply to new and modified businesses of the County's New Source Review Rule. By using the same threshold for development projects or "indirect sources" of pollution, parity is at least recognized between the two types of projects. The idea is, as much as possible, to make sure new and modified businesses do not carry all the burden of mitigating the emission impacts of indirect sources of pollution from other types of development projects. Another way of justifying this approach is to realize that direct and indirect sources of vehicle and PM_{10} emissions share the same overall emissions budget. It should also be recognized that projects that have direct sources of emissions under the California Clean Air Act already have a double requirement of mitigating stationary and indirect sources of emission.

The tracking program for PM_{10} emissions from approved and pending wood heating devices uses the same threshold of 137 lbs/day or a maximum of 423 devices per year as the threshold of approved units. The emission advantages of Phase II stoves is outweighed by this number of devices as indicated by the formula below:

$$(\#\ \text{devices})\ \left(\frac{1.5\ \text{cords}}{\text{devices}}\right)\left(\frac{2.22\ \text{tons}}{\text{cord}}\right)\left(\frac{14.6\ \text{lbs PM10}}{\text{T}}\right)\left(\frac{1\ \text{yr}}{150\ \text{days}}\right) = (\#\ \text{lbs/day})$$

# devices = 423 devices = 137 lbs/day
T = EPA AP-42 emission factor for Phase II stove

Based on this, the significant threshold for PM_{10} relative to No. 6 of the table above, is 137 lbs/day. If the number of approved heating devices exceeds 423 per year, then the cumulative effect is considered significant. **Since this action of approved devices is only a building permit, CEQA clearance does not apply, but the tracking program should still be followed.**

GLOSSARY OF AIR QUALITY TERMS

INTRODUCTION

This glossary is intended to help ordinary citizens understand the most commonly used air pollution terms. The glossary is divided into two sections:

1. GOVERNMENTAL SECTION

2. TECHNICAL SECTION

The governmental section gives an overview of the laws, regulations, and government agencies involved in ensuring healthful air quality. The technical section explains some scientific terms used to describe pollutants, the processes that form them, and their effects.

1. GOVERNMENTAL SECTION

Introduction to the Regulatory System

Federal and state governments have laws and agencies that control air pollution. At the Federal level, the U. S. Environmental Protection Agency (EPA) is responsible for safeguarding the nation's air quality. Each state must meet the standards set by the EPA. Some states like California have passed standards that are more strict than those set by the EPA, so polluters must also comply with those standards. The EPA works with state and local agencies to make sure that air quality in the state at least meets Federal standards. The state and local agencies monitor pollution and enforce both state and Federal standards.

In California, the Air Resources Board (ARB) is the lead agency responsible for air quality. Local counties overseen by the ARB develop and implement local air quality management plans. The counties specifically regulate emissions made by local stationary sources (i.e., those that don't come from moving objects like cars and trains). In addition to overseeing local regulatory efforts, ARB has direct authority over mobile sources.

Together, Federal, state, and local agencies, in coordination with the regulated and general public, are acting to bring the state into compliance with health and welfare-based air quality standards. Under the current regulatory framework, it is expected that California will meet this goal within the next two decades.

Governmental Terms

Air Toxics "Hot Spots" Information and Assessment Program (AB 2588): A California program (Health and Safety Code Section 44300, et seq.) requiring certain stationary sources to report the type and quantity of specific toxic substances they routinely release into the air. The program identifies high priority facilities and requires facilities posing significant risks to notify all exposed individuals.

APCD (Air Pollution Control District): A county agency with authority to regulate stationary, indirect, and area sources of air pollution (e.g., power plants, highway construction, and housing developments) *within a given county*, and governed by a district air pollution control board composed of the elected county supervisors. (Compare AQMD).

AQMD (Air Quality Management District): A *group of counties or portions of counties, or an individual county specified in law* with authority to regulate stationary, indirect, and area sources of air pollution *within the region* and governed by a regional air pollution control board comprised mostly of elected officials from within the region. (Compare APCD).

AQMP (Air Quality Management Plan): A plan prepared by an APCD/AQMD for a county or region designated as a nonattainment area for the purpose of bringing the area into compliance with the requirements of the national and/or California Ambient Air Quality Standards. AQMPs are incorporated into the state Implementation Plan (SIP).

Attainment Area: A geographic area which is in compliance with the National and/or California Ambient Air Quality Standards (NAAQS or CAAQS).

BACT (Best Available Control Technology): The most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for given regulated air pollutants and processes. BACT is a requirement of NSR (New Source Review) and PSD (Prevention of Significant Deterioration).

CAAQS (California Ambient Air Quality Standard): A legal limit that specifies the maximum level and time of exposure that can occur in the outside air for a given air pollutant and which is protective of human health and public welfare (Health and Safety Code 39606b). CAAQSs are recommended by the California Office of Environmental Health Hazard Assessment and adopted into regulation by the Air Resources Board. CAAQSs are the standards which must be met per the requirements of the California Clean Air Act.

CARB (California Air Resources Board): The state's lead air quality agency consisting of a nine-member, Governor-appointed board. It is responsible for attainment and maintenance of state and Federal air quality standards and is fully responsible for motor vehicle pollution control. It oversees county and regional air pollution management programs.

CCAA (California Clean Air Act): California law passed in 1988 which provides the basis for air quality planning and regulation independent of Federal regulations. A major element of the act is the requirement that local APCDs/AQMDs in violation of the CAAQS must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.

CEQA (California Environmental Quality Act): A California law which sets forth a process for public agencies to make informed decisions on discretionary project approvals. The process aids decision makers to determine whether any environmental impacts are associated with a proposed project. It requires that environmental impacts associated with a proposed project be eliminated or reduced and that air quality mitigation measures be implemented.

EPA (Environmental Protection Agency): The United states agency charged with setting policy and guidelines and carrying out legal mandates for the protection of national interests in environmental resources.

FIP (Federal Implementation Plan): In the absence of an approved state Implementation Plan (SIP), a plan prepared by the EPA which provides measures that nonattainment areas must take to meet the requirements of the Federal Clean Air Act.

Indirect Source: Any facility, building, structure, or installation, or combination thereof, which generates or attracts mobile source activity that results in emissions of any pollutant (or precursor) for which there is a state ambient air quality standard. Examples of indirect sources include employment sites, shopping centers, sports facilities, housing developments, airports, commercial and industrial development, and parking lots and garages.

Indirect Source Control Program: Rules, regulations, local ordinances and land-use controls, and other regulatory strategies of air pollution control districts or local governments used to control or reduce emissions associated with *new* and *existing* indirect sources. Indirect source control programs include regulatory

strategies such as transportation control measures (e.g., South Coast's Regulation XV for employer-based trip reduction); parking charges; land-use controls that reduce the need for vehicle travel and increase transit, bicycle, and pedestrian access; and source-specific regulations such as truck idling and travel schedule requirements.

Indirect Source Review: A major component of an indirect source control program which applies to *new* and *modified* indirect sources. Strategies for indirect source review include permit programs; review and comment on new and modified indirect source projects through the California Environmental Quality Act (CEQA) process; and coordination of air quality, transportation, and land-use policies through local government general plans. Indirect source review reduces emissions from new and modified sources through best available mitigation measures and additional off-site mitigation such as offsets and mitigation fees.

NAAQS (National Ambient Air Quality Standards): Standards set by the Federal EPA for the maximum levels of air pollutants which can exist in the outdoor air without unacceptable effects on human health or the public welfare.

NSR (New Source Review): A program used to permit new or modified industrial facilities which are in a nonattainment area and which emit nonattainment criteria air pollutants. The two major requirements of NSR are Best Available Control Technology and Emission Offset.

Nonattainment Area: A geographic area identified by the EPA and/or ARB as not meeting either NAAQS or CAAQS standards for a given pollutant.

SIP (state Implementation Plan): A document prepared by each state describing existing air quality conditions and measures which will be taken to attain and maintain national ambient air quality standards (see AQMP).

Transportation Control Measure (TCM): Any control measure to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. TCMs could include encouraging the use of carpools and mass transit.

2. TECHNICAL SECTION

Introduction to Technical Terms

Air quality management and regulations are dependent on information gathered from a number of technical disciplines. These include the study of the health and environmental effects of pollutants, air quality sampling and pollutant measurement, data management and analysis, and control technology development. This section of the glossary is intended to give the reader a general understanding of the air-related terms most commonly used in these sciences.

Technical Terms

Acid Rain: Rain which is especially acidic (pH < 5,2). Principal components of acid rain typically include nitric and sulfuric acid. These may be formed by the combination of nitrogen and sulfur oxides with water vapor in the atmosphere.

Air Pollutants: Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation, and/or materials.

BACT (Best Available Control Technology): The most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for given regulated air pollutants and processes. BACT is a requirement of NSR (New Source Review) and PSD (Prevention of Significant Deterioration).

CO (Carbon Monoxide): A colorless, odorless gas resulting from the incomplete combustion of fossil fuels. Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects. CO is a criteria air pollutant.

CO_2 (Carbon Dioxide): A colorless, odorless gas that occurs naturally in the earth's atmosphere. Significant quantities are also emitted into the air by fossil fuel combustion. Emissions of CO_2 have been implicated with increasing the greenhouse effect.

Fugitive Dust: Dust particles which are introduced into the air through certain activities such as soil cultivation, off-road vehicles, or any vehicles operating on open fields or dirt roadways.

Greenhouse Effect: The warming effect of the earth's atmosphere on the earth. Light energy from the sun which passes through the earth's atmosphere is absorbed by the earth's surface and re-radiated into the atmosphere as heat energy. The heat energy is then trapped by the atmosphere, creating a situation similar to that which occurs in a greenhouse or a car with its windows rolled up. Many scientists believe that the emission of CO_2 and other gasses into the atmosphere may increase the greenhouse effect and contribute to global warming.

Hydrocarbon: Any of a large number of compounds containing various combinations of hydrogen and carbon atoms. They may be emitted into the air as a result of fossil fuel combustion, fuel volatization, and solvent use, and are a major contributor to smog. (Also see ROG).

Inversion: A layer of warm air in the atmosphere that lies over a layer of cooler air, trapping pollutants.

Nitrogen Oxides (Oxides of Nitrogen, NO_x): A general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO_2), and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects.

Ozone: A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy. Ozone exists in the upper atmosphere ozone layer as well as at the earth's surface. Ozone at the earth's surface causes numerous adverse health effects and is a criteria air pollutant. It is a major component of smog.

Ozone Layer: A layer of ozone 12 to 15 miles above the earth's surface which helps to filter out harmful ultraviolet rays from the sun. It may be contrasted with ground-level ozone which exists at the earth's surface and is a harmful component of photochemical smog. A primary concern is that compounds such as chlorofluorocarbons (CFCs) used in air conditioning systems are depleting the ozone layer. Stringent Federal requirements will phase out production of chlorofluorocarbons in the U.S. by the year 2000.

Ozone Precursors: Chemicals such as hydrocarbons and oxides of nitrogen, occurring either naturally or as a result of human activities, which contribute to the formation of ozone, a major component of smog.

PM-10 (Particulate Matter): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, aerosols, fumes, and mists. The size of the particles (10 microns or smaller, about 0.0004 inch or less) allows them to easily enter the air sacs deep in the lungs where they may be deposited to result in adverse health effects. PM_{10} also causes visibility reduction and is a criteria air pollutant.

ROG (Reactive Organic Gas): A reactive chemical gas composed of hydrocarbons that may contribute to the formation of smog. Also sometimes referred to as Non-Methane Organic Compounds (NMOCs).

Smog: A combination of smoke, ozone, hydrocarbons, nitrogen oxides, and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects. The primary source of smog in California is motor vehicles.

Smoke: A form or air pollution consisting primarily of particulate matter (i.e., particles). Other components of smoke include gaseous air pollutants such as hydrocarbons, oxides of nitrogen, and carbon monoxide. Sources of smoke may include fossil fuel combustion, agricultural burning, and other combustion processes.

Stationary Sources: Nonmobile sources such as power plants, refineries, and manufacturing facilities which emit air pollutants. (Contrast with mobile sources.)

Toxic Hot Spot: An area where the concentration of air toxics is significantly higher than background levels and where individuals may be exposed to an elevated risk of adverse health effects. Toxic hot spot sources can include landfills, sewage treatment plants, and numerous other operations.

General Plan Implementation

General Plan Implementation

The following lists implementation programs for the General Plan goals and policies. Implementation programs describe briefly the proposed action, the agencies or departments with primary responsibility for carrying out the program, and the time frame for accomplishing the program. The programs are listed according to the types of policies which they implement. Note that the implementation programs for the Housing and Air Quality Elements are contained in those elements. The following abbreviations denote those departments responsible for carrying out the implementation of this Plan:

DSD = Development Services Department
DPW = Department of Public Works
OCM = Office of City Manager
F = Fire
P = Police
GS = General Services
CS = Community Services
RRA = Redding Redevelopment Agency

COMMUNITY DEVELOPMENT AND DESIGN

Element	Timing/ Priority	Responsibility
1. Establish project review procedures to ensure that new development will not degrade public services below established service levels, that it contributes to the enhancement of services as appropriate, and that the costs of providing public services do not exceed anticipated revenue from the development of the project over the long term. *(Pol. CDD2B)*	Ongoing	DSD
2. Prepare basic development standards and design criteria for development of "Mixed Use Villages." The guidelines should address appropriate site characteristics, mix of uses, densities and intensities, building siting, circulation, transit, open space, and related items. *(Pol. CDD9C)*	2001	DSD
3. Review and revise, as necessary, the Zoning Ordinance and map to ensure consistency with the General Plan and to specifically accomplish the following purposes: ▸ Ensure consistency with the General Plan in terms of zoning districts and development standards. ▸ Ensure consistency with the General Plan in terms of the distribution and boundaries of zoning districts. ▸ Create new zoning districts as needed. ▸ Liberalize the nonconforming use provisions of the Zoning Ordinance to allow nonconforming uses to continue subject to obtaining a use permit. *(Various Policies)*	2000	DSD
4. Review and revise, as necessary, the Subdivision Ordinance to implement the policies of and ensure consistency with the General Plan and Zoning Ordinance. Add requirements for determining whether adequate public facilities meeting established service level standards will be available at time of development and mandatory denial unless the subdivider agrees to provide them, consistent with General Plan policies. *(Various Policies)*	2000	DSD
5. Prepare comprehensive Land Use Plans for the Municipal Airport and Benton Airpark as necessary to ensure consistency with the adopted Plan and to submit the plans to the Airport Land Use Commission for approval. *(Various Policies)*	2002	DSD

Element	Timing/ Priority	Responsibility
6. Require preparation and approval of specific plans for those areas shown on Appendix "A." Specific plans shall comply with State law requirements and the specific plan guidelines contained in Appendix "A" of the Policy Document. *(Pol. CDD1I)*	As needed	DSD
7. Prepare and publish design standards for storm-water detention basins which address the following: ▸ Depth, shape, side slopes. ▸ Landscape and plant materials. ▸ Multiuse recreational concepts. ▸ Pollution-filtration concepts. *(Pol.CDD6B, 6C)*	2002	DPW; DSD
8. Prepare and adopt Hillside Development Standards for inclusion in the Subdivision Ordinance. These standards should include, but not be limited to, provisions for the following: ▸ Appropriate densities based on degree of natural slope. ▸ Parameters for street, utility, and building-site grading. ▸ Erosion and sediment control. ▸ Surface and subsurface drainage. ▸ Vegetation removal and revegetation requirements. *(Pol. CDD7B)*	2002	DSD; DPW
9. Prepare and adopt provisions to be included in the Zoning Ordinance, including an incentive program to encourage mixed-use projects—particularly in the Downtown area. Such a program should identify appropriate geographic locations for the use of incentives and parameters for receiving them. Specific incentives to be considered include, but are not limited to: ▸ Amending the Zoning Ordinance to provide for increases in allowable commercial floor area when a building or project also contains residential uses. ▸ Amending the Zoning Ordinance to establish reduced parking requirements for mixed-use projects. ▸ Modifying the Traffic Impact Fee program to reflect the reduction in vehicle trips that can be expected to be attained. ▸ Utilizing Redding Redevelopment Agency funds to assemble and develop key properties in cooperation with the private-sector development community. ▸ Establishing criteria to expedite the development review process. *(Various Policies)*	2001	DSD
10. Prepare and adopt an incentive package, either by amendment of the Zoning Ordinance or by City Council Policy, to encourage infill development of vacant or underutilized parcels. *(Pol. CDD10C)*	2001	DSD
11. Amend the Zoning Ordinance as necessary to allow, and provide parameters for, the establishment of small neighborhood-serving stores within residential districts. The ordinance should address the following minimum elements: ▸ Maximum size of facilities. ▸ Allowable and inappropriate uses. ▸ Parking. ▸ Compatibility with adjacent land uses. *(Pol CDD10G)*	2000	DSD
12. Amend the Zoning Ordinance as necessary to allow guest houses/second units in single-family residential districts consistent with Government Code Section 65852.2. *(Pol. CDD11F)*	2000	DSD
13. Develop and implement a self-supporting program of rental housing inspections which includes requirements for upgrading property to meet minimum standards. *(CDD12G)*	2003	H; DSD

Element	Timing/ Priority	Responsibility
14. Develop guidelines for preparation of the independent market analysis required in conjunction with General Plan amendment requests for significant retail and office commercial land. These guidelines should identify the project-size thresholds and the specific type and level of market information required. *(Pol. CDD13A)*	2001	DSD
15. Prepare and adopt comprehensive design criteria to be applied to the development of public and private projects, including single-family subdivisions, multiple-family housing, and commercial development. The guidelines should not attempt to regulate or dictate architectural design, but establish parameters relating to scale, mass, building patterns, landscape, parking areas, views, and other appropriate topics. Integrate design standards into the site-plan and development-review process. *(Pol. CDD14A)*	2001	DSD
16. Prepare and adopt new street standards that include revised cross-sections for residential streets. The standards should consider the hierarchical nature of residential streets by establishing parameters for reduced street widths. The standards should also accommodate the use of landscaped parkways and appropriate traffic-calming devices. *(Pol. CDD17A)*	2001	DSD; DPW
17. Develop a citywide plan, priority system, and funding program for systematically undergrounding overhead utility lines in existing neighborhoods and commercial areas. Emphasis should be placed on undergrounding in those areas which are visible to the greatest number of residents and visitors or locations where road-improvement projects are already planned. *(Pol. CDD18C)*	2003	E
18. Prepare and adopt a Specific Plan and Development Guidelines for Downtown Redding to address: ▸ Appropriate land use classifications. ▸ Desired mixed-use concepts. ▸ Public gathering places. ▸ Building scale and mass. ▸ Facade and overhang treatments. ▸ Downtown circulation and streetscape. ▸ Parking and parking structures. ▸ Linkage to other districts. *(Pol. CDD-D1)*	2000	RRA; DSD
18. Review the General Plan annually, focusing principally on actions undertaken in the previous year to carry out the implementation programs of the Plan. The Planning Commission's report to the City Council shall include, as the Commission deems appropriate, recommendations for amendments to the General Plan. This review shall also be used to satisfy the requirements of Public Resources Code §21081.6 for a mitigation monitoring program. *(Pol. CDD22A)*	Annually	DSD
19. The City shall conduct a major review of the General Plan every five years and revise it as deemed necessary. *(Pol. CDD22B)*	2000; every five years thereafter	DSD
20. Implement the provisions of this General Plan through its ongoing project review process. *(Various Policies)*	Ongoing	DSD

TRANSPORTATION

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
1. Prepare and adopt a Right-of-Way Dedication Ordinance defining procedures and standards for street dedications. *(Pol. T1C)*	2000	DSD; DPW
2. Revise the City's current Construction Standards to incorporate: ▸ Desired design features for arterials, including landscape strips between the curb and sidewalk, Class II bicycle lanes, and landscaped medians. Transitions between standard sidewalk layouts and the new designs should also be addressed. (Policy T3A) ▸ Standards for the full range of potential bicycle and pedestrian facilities expected to be developed within the City. (Policy T6A, T8A) ▸ Criteria for Planning Commission and/or City Engineer approval of exceptions to standard street dedication and improvement requirements.	2001	DPW; DSD
3. Reevaluate the City's existing Traffic Impact Fee program and modify it if necessary to ensure that the fees collected actually cover the costs of identified improvements needed to maintain adopted levels of service. *(Pol. T3E, T3F)*	2000	OCM; DPW; DSD
4. Periodically update the City's traffic model by incorporating new road improvements and land use modifications. This type of maintenance will ensure that the model continues to function as an accurate and effective planning tool. *(Pol. T1B)*	Ongoing	DPW
5. Evaluate and establish as necessary a central control system to synchronize traffic signals along major transit routes. *(Pol. T3G)*	2001 and ongoing	DPW
6. Prepare and implement a Comprehensive Bikeway Plan to specifically locate, prioritize, and identify funding sources for commuter and recreational bicycle facilities. *(Pol. T8A)*	2002	CS; DPW; DSD
7. Monitor aviation activity and needs on an ongoing basis. Periodically update local Airport Land Use Plans and Airport Master Plans to address changing conditions and/or new opportunities for airport improvements. *(Pol. T10A)*	Ongoing	DSD
8. Develop strategies to generate ongoing funding for general Airport operations and a reserve which can be used to meet the matching fund requirements of grant funding sources. *(Pol. T10A)*	Ongoing	DSD
9. Complete a project study report and secure funding for a Gold Street undercrossing (or other appropriate location) and South Bonnyview Road overcrossing of the Union Pacific Railroad. *(Pol. T12A)*	2002	DPW

NATURAL RESOURCES

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
1. Modify the City's Grading Ordinance to: ▸ Require that grading or other site work undertaken during the rainy season be subject to an Erosion and Sediment Control Plan that has been approved by a Certified Erosion and Sediment Control Specialist and the City's Public Works Department. ▸ Establish erosion-control requirements and review process for small projects, including the construction of single-family residences. *(Pol. NR1A)*	2001	DPW; DSD
2. Amend the City's "Open Space" Zoning District as necessary to incorporate stream corridor/riparian vegetation buffer provisions and to establish appropriate uses within these areas. *(Pol. NR6D)*	2002	DSD
3. Modify Chapter 18.63 "Surface Mining and Reclamation" of the City's Municipal Code to be consistent with the General Plan. *(Pol. NR13A)*	2001	DSD
4. Prepare a Comprehensive Open Space Plan that addresses the following: ▸ Open-space framework. ▸ Role of public and private open-space areas. ▸ Agricultural land preservation. ▸ Important ecological areas. ▸ Acquisition and management of public open-space lands. *(Pol. NR11A)*	2001	DSD; CS

HEALTH AND SAFETY

Element	Timing/Priority	Responsibility
1. Maintain copies of the Seismic Hazards Assessment for the City of Redding, prepared by Woodward-Clyde Federal Services (1995), and any other current seismic and geologic studies at locations accessible to the general public and developers, including the main branch of the Shasta County Library and the Building and Planning Divisions of the City of Redding Development Services Department. *(Pol. HS1A, 1B)*	Ongoing	DSD
2. Continue to implement the City's Floodplain Ordinance and undertake any other actions necessary to comply with Federal and State floodplain requirements or to maintain the City's eligibility under the National Flood Insurance Program. *(Pol. HS2A)*	Ongoing	DSD
3. Periodically review and update the Citywide Master Storm Drain Study to reflect items such as: ▸ Improved modeling techniques and projections. ▸ Changes in established flood elevations resulting from increased development. ▸ Modifications to identified hazard areas resulting from the installation of new flood-protection facilities and drainage improvements. ▸ Additional improvements that may be needed to enhance flood-protection capabilities. *(Pol. HS2C)*	Ongoing	DPW
4. Undertake additional studies necessary and implement a regional storm-water detention system. Such studies should address appropriate locations, sizes, designs, funding, maintenance, and other pertinent information. *(Pol. HS2G)*	2000	DPW
5. Rezone newly identified flood-hazard areas as "Open Space." *(Pol. HS2C, HS2E)*	Ongoing	DSD
6. Review and update the City's *Disaster Response Plan* to address incidences of flooding created by uncontrolled releases from Shasta Dam and coordination with the U.S. Bureau of Reclamation, notification procedures, and preferred evacuation routes in the event of a dam failure at either Shasta or Whiskeytown Dams. Periodically update the City's *Disaster Response Plan*, as necessary, to ensure that an adequate plan and program can be activated in response to a variety of emergency situations. *(Pol. HS3A)*	2001	F

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
7. Develop and adopt a Comprehensive Fire Protection and Management Manual which addresses items including, but not limited to: ▸ Specific building materials, site-design features, setbacks and preferred landscape materials/ placement that can be used to protect development in high wildland fire-hazard areas. ▸ Circumstances when cul-de-sacs longer than 600 feet in length may be considered. ▸ Appropriate locations for unpaved fire-access roads in high wildland fire-hazard areas. *(Pol. HS4E)*	2001	F; DSD
8. Continue to identify existing crime patterns, particularly those involving career criminals, and study methods to further enhance community-oriented policing and other programs geared to this group. *(Pol. HS5C)*	Ongoing	P
9. Pursue incorporation of advanced technology systems and automation to improve efficiencies and the quality of service provided. Such systems may include, but are not limited to: ▸ A Single Entry Electronic Information System. ▸ A new Records Management System (RMS). ▸ A Mobile Data System. ▸ A Voice Recognition System. ▸ Driver's License Scanners. *(Pol. HS5C)*	Ongoing	P
10. Acquire funds for the purchase of identified acquisition zones north and south of the Redding Municipal Airport to reduce noise and safety impacts. *(Pol. HS7A)*	Ongoing	DSD
11. Forward all proposed development projects which involve the manufacture, use, and storage of hazardous materials to the Shasta County Environmental Health Division. This procedure will ensure that all appropriate business and emergency plans are required and any other special requirements or mitigation measures are incorporated into conditions of approval for the project. *(Pol. HS9A)*	Ongoing	DSD
12. Continue to publicize the City's Household Hazardous Waste Collection Program, including information regarding the types of materials accepted and days and hours of facility operation, to encourage maximum participation by residents. *(Pol. HS9B)*	Ongoing	GS
13. Require appropriate City staff to undergo regular disaster-preparedness training, including the staging of simulated disaster and response drills. *(Pol. HS9E)*	Ongoing	F

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
1. Develop and publish a Noise Attenuation Manual which illustrates preferred site planning and building materials/design techniques to effectively mitigate noise impacts. *(Pol. N1E)*	2003	DSD
2. Record changes that occur in the community's noise environment by reviewing available technical and acoustical data and studies conducted for proposed development projects. *(Pol. N1A)*	Ongoing	DSD
3. Maintain and periodically update existing local noise maps as new information about the community's noise environment becomes available to ensure accuracy in land use compatibility planning and appropriate mitigation of noise impacts. *(Pol. N1A)*	Ongoing	DSD
4. Implement the noise policies set forth in the City's *Comprehensive Land Use Plans* for Benton Airpark and Redding Municipal Airport. *(Pol. N2A)*	Ongoing	DSD
5. Amend sections of the Zoning Ordinance pertaining to industrial and commercial development standards to require that proposed projects be designed in a manner to minimize potential noise impacts on adjacent noise-sensitive uses. *(Pol. N3B)*	2000	DSD
6. Adopt the Noise Ordinance to establish appropriate standards for various noise-generating uses throughout the community. *(Pol. N1B)*	2003	DSD
7. Use the development and environmental review process to ensure that noise impacts are adequately addressed and sufficiently mitigated in accordance with the State's Noise Insulation Standards and with the policies set forth in the Noise Element of the General Plan. *(Various Policies)*	Ongoing	DSD

RECREATION

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
1. Amend the Open Space Ordinance as necessary to permit limited development of river and creek corridor areas for trails; safety; and other low-impact, public-use activities. *(Pol. CDD5A)*	2000	DSD
2. Prepare and adopt Citywide Recreation and Trails Master Plans that address: ▸ Specific locations where trails will be developed, including the type of trail that is planned (single-purpose, multipurpose, paved, unpaved, etc.). The City's trail system should focus on linking neighborhoods to other land uses and significant destination points within the community. ▸ Open-space areas where land dedications and easements should be acquired to provide public access, but where no formal trail improvements are planned. ▸ Incorporation of the Sacramento River Trail within the Regional River Parkway. ▸ Separation of bicyclists and pedestrians from vehicular traffic, whenever feasible. ▸ Separation between pedestrian, skater, and bicycle facilities to the extent necessary for safety. ▸ A priority system for the development of trails and trail connections, including a City-looped system. Emphasis should be placed on connecting existing trails, when possible, prior to constructing new, disconnected trail segments. ▸ Identification of funding sources for trail development. ▸ Incentives to encourage private property owners to dedicate lands for public trail purposes. ▸ Interfaces between public trails and private property, including recommended features or strategies designed to protect the security and privacy of adjacent residents. ▸ Short- and long-term maintenance costs. The plan should be developed in conjunction with Federal, State, and local agencies; private property owners; and community groups. *(Pol. R11A)*	2001	CS; DSD

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
3. Prepare and adopt a Citywide Parks and Recreation Master Plan that addresses: ▸ Updated site-selection and development standards for the park types listed in this element. ▸ A priority system for the acquisition and improvement of parklands. ▸ A system for providing partial land, in-lieu fee, and/or park development credits for: • Private park and recreation facilities. • Recreation amenities contributed to existing public parks or schools where long-term, joint-use agreements with the City are in place. • Private development of public parks. ▸ Strategies to address existing sites in the City's inventory of undeveloped parkland which are found to be unsuitable for the public park types described in this element. *(Pol. R4A)*	2001	CS
4. Continue to require new residential development to dedicate land or pay in-lieu fees toward the provision of parks at the maximum land-dedication ratios allowed under State law to offset projected impacts on the public park system. *(Pol. R5B)*	Ongoing	DSD; CS
5. Pursue both existing and alternative sources of funding to provide parklands and facilities which will adequately meet community needs. The following new sources of funds should be given careful review: ▸ Establishment of a Parks and Recreation District. ▸ Higher percentage of redevelopment funds. ▸ Open-space and park bonds. *(Pol. R10B)*	Ongoing	CS
6. Conduct periodic surveys to determine the recreation desires of the citizens of Redding. Design and implement recreation programs which are responsive to the desires reflected by the majority of survey respondents. *(Pol. R4A)*	Ongoing	CS

NOTE: The implementation strategies for the Housing Element and Air Quality Element are contained within those elements.

ECONOMIC DEVELOPMENT

ELEMENT	TIMING/PRIORITY	RESPONSIBILITY
1. Utilize a prioritized ranking system which will ensure that substantial financial incentives such as infrastructure improvements, land buy-downs, loans, and other nonprogrammatic incentives are provided primarily to those industries and businesses that will demonstrate net economic and social benefits to the community. *(Pol. ED3A, ED3B, ED3C, ED3D)*	2000	OCM
2. Leverage City economic development funds for attracting industry by participating in national, state, regional, and county business attraction marketing organizations which have significant promotional budgets and compatible key industry targets. *(Pol. ED3E)*	Ongoing	OCM
3. Continue direct personal contact with existing businesses, small and large, and those which have growth potential. Commit resources to address problems identified in business retention surveys and assist businesses wishing to expand. *(Pol. ED2B)*	Ongoing	OCM
4. Place a priority on processing development permits for industrial-related projects and/or expansions and assist businesses throughout the process. *(Pol. ED1J)*	Ongoing	DSD; OCM
5. Develop a formalized process to assist those business representatives that contact the City for business relocation, expansion, or similar information. ▸ Train appropriate staff in available economic development and incentive programs. ▸ Maintain strong coordination between the Economic Development Director and staff involved in the development process. ▸ Develop standard promotional materials for use with business attraction prospects. *(Pol. ED2B)*	2001	OCM
6. Where feasible, participate financially in public/private partnerships with the private sector on significant economic development projects that represent a good investment for the City as well as the company, investors, and/or developers in accordance with adopted policies. *(Pol. ED3A)*	Ongoing	OCM
7. Create and maintain a database of local industrial lands information which will be available to all interested parties. The database should include relevant demographic, environmental, and economic information, including aerial photographs where appropriate. *(Various Policies)*	2001	OCM
8. Continue to implement the Development Services Department's Service Enhancement Program to enhance service to the development industry. *(Pol. ED2B)*	Ongoing	DSD

Element	Timing/Priority	Responsibility
9. Modify the City's jobs credit incentive program such that it is administered by and incentives are authorized by the City Manager, rather than by case-by-case action of the City Council. *(Pol. ED3A)*	2000	OCM
10. Conduct periodic "business roundtable" meetings to foster communication between the City and local businesses. *(Pol. ED2B)*	Ongoing	OCM
11. Explore the feasibility and preferred locations for construction of a new convention facility. *(Pol. ED5A)*	2003	CS
12. Develop a strategy for the rehabilitation or adaptive reuse of commercial centers that are experiencing decline or substandard economic performance. *(Pol. ED5D)*	2002	DSD; RRA

PUBLIC FACILITIES AND SERVICES

ELEMENT	TIMING/ PRIORITY	RESPONSIBILITY
1. When reviewing applications for land use designation changes (i.e. zone change, General Plan Amendment, Specific Plan), conduct a thorough analysis of the impacts of the proposed changes on all aspects of the City's infrastructure system, and require mitigation as appropriate. *(Pol. PF1C)*	Ongoing	DSD
2. Regularly update and adopt the City's Capital Improvement Program (CIP) to prioritize funding for public works projects in accordance with the General Plan. *(Pol. PF1I)*	Ongoing	DPW
3. Implement ordinances to protect life, control fire losses and fire protection costs through the use of automatic suppression systems. *(Pol. PF4E)*	2002	FD
4. Periodically update the City's Master Water Plan to reflect changes to the General Plan General Plan Diagram, water use pattern changes, regulatory changes, or other circumstances. *(Pol. PF5F)*	Ongoing	DPW
5. Periodically review and update , as necessary, the City's Electric Utility Strategic Plan to reflect industry restructuring developments and other changing conditions. *(Pol. PF7A)*	Ongoing	ED
6. Select and pursue the acquisition of sites considered appropriate for regional stormwater detention /retention facilities within the incorporated area. *(Pol. PF9B)*	2002	DPW, DSD
7. Construct regional stormwater detention/retention basins at locations that will minimize current flooding risk. *(Pol. PF9C)*	2004	DPW

Glossary

THE CALIFORNIA GENERAL PLAN GLOSSARY

Abbreviations

ADT: Average daily trips made by vehicles or persons in a 24-hour period
ALUC: Airport Land Use Commission
BMR: Below-market-rate dwelling unit
CBD: Central Business District
CC&Rs: Covenants, Conditions, and Restrictions
CDBG: Community Development Block Grant
CEQA: California Environmental Quality Act
CFD: A Mello-Roos Community Facilities District
CHFA: California Housing Finance Agency
CIP: Capital Improvements Program
CNEL: Community Noise Equivalent Level
CMP: Congestion Management Plan
COG: Council of Governments
CRA: Community Redevelopment Agency
dB: Decibel
dBA: "A-weighted" decibel
EIR: Environmental Impact Report (State)
EIS: Environmental Impact Statement (Federal)
FAR: Floor Area Ratio
FAUS: Federal Aid to Urban Systems
FEMA: Federal Emergency Management Agency
FHWA: Federal Highway Administration
FIR: Fiscal Impact Report
FIRM: Flood Insurance Rate Map
FmHA: Farmers Home Administration
GMI: Gross Monthly Income
HAP: Housing Assistance Plan
HCD: Housing and Community Development Department of the State of California
HOV: High Occupancy Vehicle
HUD: U.S. Dept. of Housing and Urban Development
JPA: Joint Powers Authority
LAFCo: Local Agency Formation Commission
L_{dn}: Day and Night Average Sound Level
L_{eq}: Sound Energy Equivalent Level
LHA: Local Housing Authority
LOS: Level of Service
LRT: Light (duty) Rail Transit
NEPA: National Environmental Policy Act
OPR: Office of Planning and Research, State of California
PUD: Planned Unit Development
SRO: Single Room Occupancy
TDM: Transportation Demand Management
TDR: Transfer of Development Rights
TSM: Transportation Systems Management
UBC: Uniform Building Code
UHC: Uniform Housing Code
UMTA: Urban Mass Transportation Administration
VMT: Vehicle Miles Traveled

Acceptable Risk

A hazard deemed to be a tolerable exposure to danger given the expected benefits to be obtained. Different levels of acceptable risk may be assigned according to the potential danger and the criticalness of the threatened structure. The levels may range from "near zero" for nuclear plants and natural gas transmission lines to "moderate" for open space, ranches and low-intensity warehouse uses.

Access/Egress

The ability to enter a site from a roadway and exit a site onto a roadway by motorized vehicle.

Acres, Gross

The entire acreage of a site. Most communities calculate gross acreage to the centerline of proposed bounding streets and to the edge of the right-of-way of existing or dedicated streets.

Acres, Net

The portion of a site that can actually be built upon. The following generally are not included in the net acreage of a site: public or private road rights-of-way, public open space, and flood ways.

Active Solar System

A system that uses a mechanical device, such as pumps or fans run by electricity in addition to solar energy, to transport air or water between a solar collector and the interior of a building for heating or cooling. (See "Passive Solar System.")

Adaptive Reuse

The conversion of obsolescent or historic buildings from their original or most recent use to a new use. For example, the conversion of former hospital or school buildings to residential use, or the conversion of an historic single-family home to office use.

Adverse Impact

A negative consequence for the physical, social, or economic environment resulting from an action or project.

Affordability Requirements

Provisions established by a public agency to require that a specific percentage of housing units in a project or development remain affordable to very low- and low- income households for a specified period.

Affordable Housing

Housing capable of being purchased or rented by a household with very low, low, or moderate income, based on a household's ability to make monthly payments necessary to obtain housing. Housing is considered affordable when a household pays less than 30 percent of its gross monthly income (GMI) for housing including utilities.

Agency

The governmental entity, department, office, or administrative unit responsible for carrying out regulations.

Agricultural Preserve

Land designated for agriculture or conservation. (See "Williamson Act.")

Agriculture

Use of land for the production of food and fiber, including the growing of crops and/or the grazing of animals on natural prime or improved pasture land.

Agriculture-related Business

Feed mills, dairy supplies, poultry processing, creameries, auction yards, veterinarians and other businesses supporting local agriculture.

Air Pollution

Concentrations of substances found in the atmosphere that exceed naturally occurring quantities and are undesirable or harmful in some way.

Air Rights

The right granted by a property owner to a buyer to use space above an existing right-of-way or other site, usually for development.

Airport-related Use

A use that supports airport operations including, but not limited to, aircraft repair and maintenance, flight instruction, and aircraft chartering.

Alley

A narrow service way, either public or private, which provides a permanently reserved but secondary means of public access not intended for general traffic circulation. Alleys typically are located along rear property lines.

Alluvial

Soils deposited by stream action.

Alquist-Priolo Act, Seismic Hazard Zone

A seismic hazard zone designated by the State of California within which specialized geologic investigations must be prepared prior to approval of certain new development.

Ambient

Surrounding on all sides; used to describe measurements of existing conditions with respect to traffic, noise, air and other environments.

Annex, v.

To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

Apartment

(1) One or more rooms of a building used as a place to live, in a building containing at least one other unit used for the same purpose. (2) A separate suite, not owner occupied, which includes kitchen facilities and is designed for and rented as the home, residence, or sleeping place of one or more persons living as a single housekeeping unit.

Approach Zone

The air space at each end of a landing strip that defines the glide path or approach path of an aircraft and that should be free from obstruction.

Appropriate

An act, condition, or state that is considered suitable.

Aquifer

An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Arable

Land capable of being cultivated for farming.

Archaeological

Relating to the material remains of past human life, culture, or activities.

Architectural Control; Architectural Review

Regulations and procedures requiring the exterior design of structures to be suitable, harmonious, and in keeping with the general appearance, historic character, and/or style of surrounding areas. A process used to exercise control over the design of buildings and their settings. (See "Design Review.")

Area; Area Median Income

As used in State of California housing law with respect to income eligibility limits established by the U.S. Department of Housing and Urban Development (HUD), "area" means metropolitan area or non-metropolitan county. In non-metropolitan areas, the "area median income" is the higher of the county median family income or the statewide non-metropolitan median family income.

Arterial

Medium-speed (30-40 mph), medium-capacity (10,000-35,000 average daily trips) roadway that provides intra-community travel and access to the county-wide highway system. Access to community arterials should be provided at collector roads and local streets, but direct access from parcels to existing arterials is common.

Artesian

An aquifer in which water is confined under pressure between layers of impermeable material. Wells tapping into an artesian stratum will flow naturally without the use of pumps. (See "Aquifer.")

Article 34 Referendum

Article 34 of the Constitution of the State of California requires passage of a referendum within a city or county for approval of the development or acquisition of a publicly financed housing project where more than 49 percent of the units are set aside for low-income households.

Articulation

Variation in the depth of the building plane, roof line, or height of a structure that breaks up plain, monotonous areas and creates patterns of light and shadow.

Assessment District

(See "Benefit Assessment District.")

Assisted Housing

Generally multi-family rental housing, but sometimes single-family ownership units, whose construction, financing, sales prices, or rents have been subsidized by federal, state, or local housing programs including, but not limited to Federal Section 8 (new construction, substantial rehabilitation, and loan management set-asides), Federal Sections 213, 236, and 202, Federal Section 221(d)(3) (below-market interest rate program), Federal Section 101 (rent supplement assistance), CDBG, FmHA Section 515, multi-family mortgage revenue bond programs, local redevelopment and in lieu fee programs, and units developed pursuant to local inclusionary housing and density bonus programs. By January 1, 1992, all California Housing Elements are required to address the preservation or replacement of assisted housing that is eligible to change to market rate housing by 2002.

Auto Mall

A single location that provides sales space and centralized services for a number of automobile dealers, and which may include such related services as auto insurance dealers and credit institutions that provide financing opportunities.

Automobile-intensive Use

A use of a retail area that depends on exposure to continuous auto traffic.

Base Flood

In any given year, a 100-year flood that has 1 percent likelihood of occurring, and is recognized as a standard for acceptable risk.

Baylands

Areas along a bay that are permanently wet or periodically covered with shallow water, such as saltwater and freshwater marshes, open or closed brackish marshes, swamps, mudflats, and fans.

Bed and Breakfast

Usually a dwelling unit, but sometimes a small hotel, which provides lodging and breakfast for temporary overnight occupants, for compensation.

Below-market-rate (BMR) Housing Unit

(1) Any housing unit specifically priced to be sold or rented to low- or moderate-income households for an amount less than the fair-market value of the unit. Both the State of California and the U.S. Department of Housing and Urban Development set standards for determining which households qualify as "low income" or "moderate income." (2) The financing of housing at less than prevailing interest rates.

Benefit Assessment District

An area within a public agency's boundaries that receives a special benefit from the construction of one or more public facilities. A Benefit Assessment District has no legal life of its own and cannot act by itself. It is strictly a financing mechanism for providing public infrastructure as allowed under the Streets And Highways Code. Bonds may be issued to finance the improvements, subject to repayment by assessments charged against the benefitting properties. Creation of a Benefit Assessment District enables property owners in a specific area to cause the construction of public facilities or to maintain them (for example, a downtown, or the grounds and landscaping of a specific area) by contributing their fair share of the construction and/or installation and operating costs.

Bicycle Lane (Class II facility)

A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Path (Class I facility)

A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but typically are separated from them by landscaping.

Bicycle Route (Class III facility)

A facility shared with motorists and identified only by signs, a bicycle route has no pavement markings or lane stripes.

Bikeways

A term that encompasses bicycle lanes, bicycle paths, and bicycle routes.

Biomass

Plant material, used for the production of such things as fuel alcohol and non-chemical fertilizers. Biomass sources may be plants grown especially for that purpose or waste products from livestock, harvesting, milling, or from agricultural production or processing.

Biotic Community

A group of living organisms characterized by a distinctive combination of both animal and plant species in a particular habitat.

Blight

A condition of a site, structure, or area that may cause nearby buildings and/or areas to decline in attractiveness and/or utility. The Community Redevelopment Law (Health and Safety Code, Sections 33031 and 33032) contains a definition of blight used to determine eligibility of proposed redevelopment project areas.

Bond

An interest-bearing promise to pay a stipulated sum of money, with the principal amount due on a specific date. Funds raised through the sale of bonds can be used for various public purposes.

Buffer Zone

An area of land separating two distinct land uses that acts to soften or mitigate the effects of one land use on the other.

Building

Any structure used or intended for supporting or sheltering any use or occupancy.

Building Height

The vertical distance from the average contact ground level of a building to the highest point of the coping of a flat roof or to the deck line of a mansard roof or to the mean height level between eaves and ridge for a gable, hip, or gambrel roof. The exact definition varies by community. For example, in some communities building height is measured to the highest point of the roof, not including elevator and cooling towers.

Buildout; Build-out

Development of land to its full potential or theoretical capacity as permitted under current or proposed planning or zoning designations. (See "Carrying Capacity (3).")

Business Services

A subcategory of commercial land use that permits establishments primarily engaged in rendering services to other business establishments on a fee or contract basis, such as advertising and mailing; building maintenance; personnel and employment services; management and consulting services; protective services; equipment rental and leasing; photo finishing; copying and printing; travel; office supply; and similar services.

Busway

A vehicular right-of-way or portion thereof--often an exclusive lane--reserved exclusively for buses.

California Environmental Quality Act (CEQA)

A State law requiring State and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an Environmental Impact Report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project. General Plans require the preparation of a "program EIR."

California Housing Finance Agency (CHFA)

A State agency, established by the Housing and Home Finance Act of 1975, which is authorized to sell revenue bonds and generate funds for the development, rehabilitation, and conservation of low-and moderate-income housing.

Caltrans

California Department of Transportation.

Capital Improvements Program (CIP)

A program, administered by a city or county government and reviewed by its planning commission, which schedules permanent improvements, usually for a minimum of five years in the future, to fit the projected fiscal capability of the local jurisdiction. The program generally is reviewed annually, for conformance to and consistency with the general plan.

Carbon Dioxide

A colorless, odorless, non-poisonous gas that is a normal part of the atmosphere.

Carbon Monoxide

A colorless, odorless, highly poisonous gas produced by automobiles and other machines with internal combustion engines that imperfectly burn fossil fuels such as oil and gas.

Carrying Capacity

Used in determining the potential of an area to absorb development: (1) The level of land use, human activity, or development for a specific area that can be accommodated permanently without an irreversible change in the quality of air, water, land, or plant and animal habitats. (2) The upper limits of development beyond which the quality of human life, health, welfare, safety, or community character within an area will be impaired. (3) The maximum level of development allowable under current zoning. (See "Buildout.")

Caulking

A waterproof compound or material used to stop up and make tight against leakage (as the cracks in a window frame).

Census

The official decennial enumeration of the population conducted by the federal government.

Central Business District (CBD)

The major commercial downtown center of a community. General guidelines for delineating a downtown area are defined by the U.S. Census of Retail Trade, with specific boundaries being set by the local municipality.

Channelization

(1) The straightening and/or deepening of a watercourse for purposes of storm-runoff control or ease of navigation. Channelization often includes lining of stream banks with a retaining material such as concrete. (2) At the intersection of roadways, the directional separation of traffic lanes through the use of curbs or raised islands that limit the paths that vehicles may take through the intersection.

Character

Special physical characteristics of a structure or area that set it apart from its surroundings and contribute to its individuality.

Circulation Element

One of the seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the planning and management of existing and proposed thoroughfares, transportation routes, and terminals, as well as local public utilities and facilities, all correlated with the land use element of the general plan.

City

City with a capital "C" generally refers to the government or administration of a city. City with a lower case "c" may mean any city or may refer to the geographical area of a city (*e.g.*, the city bikeway system.)

Clear Zone

That section of an approach zone of an airport where the plane defining the glide path is 50 feet or less above the center-line of the runway. The clear zone ends where the height of the glide path above ground level is above 50 feet. Land use under the clear zone is restricted.

Clustered Development

Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an open space area.

Cogeneration

The harnessing of heat energy, that normally would be wasted, to generate electricity--usually through the burning of waste.

Collector

Relatively-low-speed (25-30 mph), relatively-low-volume (5,000-20,000 average daily trips) street that provides circulation within and between neighborhoods. Collectors usually serve short trips and are intended for collecting trips from local streets and distributing them to the arterial network.

Combined Sewer/Combination Sewer

A sewerage system that carries both sanitary sewage and stormwater runoff.

Commercial

A land use classification that permits facilities for the buying and selling of commodities and services.

Community Care Facility

Elderly housing licensed by the State Health and Welfare Agency, Department of Social Services, typically for residents who are frail and need supervision. Services normally include three meals daily, housekeeping, security and emergency response, a full activities program, supervision in the dispensing of medicine, personal services such as assistance in grooming and bathing, but no nursing care. Sometimes referred to as residential care or personal care. (See "Congregate Care.")

Community Child Care Agency

A nonprofit agency established to organize community resources for the development and improvement of child care services.

Community Development Block Grant (CDBG)

A grant program administered by the U.S. Department of Housing and Urban Development (HUD) on a formula basis for entitlement communities, and by the State Department of Housing and Community Development (HCD) for non-entitled jurisdictions. This grant allots money to cities and counties for housing rehabilitation and community development, including public facilities and economic development.

Community Facilities District

Under the Mello-Roos Community Facilities Act of 1982 (Government Code Section 53311 *et seq*), a legislative body may create within its jurisdiction a special district that can issue tax-exempt bonds for the planning, design, acquisition, construction, and/or operation of public facilities, as well as provide public services to district residents. Special tax assessments levied by the district are used to repay the bonds.

Community Noise Equivalent Level (CNEL)

A 24-hour energy equivalent level derived from a variety of single-noise events, with weighting factors of 5 and 10 dBA applied to the evening (7 PM to 10 PM) and nighttime (10 PM to 7 AM) periods, respectively, to allow for the greater sensitivity to noise during these hours.

Community Park

Land with full public access intended to provide recreation opportunities beyond those supplied by neighborhood parks. Community parks are larger in scale than neighborhood parks but smaller than regional parks.

Community Redevelopment Agency (CRA)

A local agency created under California Redevelopment Law, or a local legislative body that has elected to exercise the powers granted to such an agency, for the purpose of planning, developing, re-planning, redesigning, clearing, reconstructing, and/or rehabilitating all or part of a specified area with residential, commercial, industrial, and/or public (including recreational) structures and facilities. The redevelopment agency's plans must be compatible with adopted community general plans.

Community Service Area

A geographic subarea of a city or county used for the planning and delivery of parks, recreation, and other human services based on an assessment of the service needs of the population in that subarea.

Commute-shed

The area from which people do or might commute from their homes to a specific workplace destination, given specific assumptions about maximum travel time or distance.

Comparison Goods

Retail goods for which consumers will do comparison shopping before making a purchase. These goods tend to have a style factor and to be "larger ticket" items such as clothes, furniture, appliances and automobiles.

Compatible

Capable of existing together without conflict or ill effects.

Composting

The treatment of solid organic refuse through aerobic, biologic decomposition.

Condominium

A structure of two or more units, the interior spaces of which are individually owned; the balance of the property (both land and building) is owned in common by the owners of the individual units. (See "Townhouse.")

Congestion Management Plan (CMP)

A mechanism employing growth management techniques, including traffic level of service requirements, standards for public transit, trip reduction programs involving transportation systems management and jobs/housing balance strategies, and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development. AB 1791, effective August 1, 1990, requires all cities, and counties that include urbanized areas, to adopt by December 1, 1991, and annually update a Congestion Management Plan.

Congregate Care

Apartment housing, usually for seniors, in a group setting that includes independent living and sleeping accommodations in conjunction with shared dining and recreational facilities. (See "Community Care Facility.")

Conservation

The management of natural resources to prevent waste, destruction, or neglect. The state mandates that a Conservation Element be included in the general plan.

Conservation Element

One of the seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the conservation, development, and use of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

Consistent

Free from variation or contradiction. Programs in the General Plan are to be consistent, not contradictory or preferential. State law requires consistency between a general plan and implementation measures such as the zoning ordinance.

Convenience Goods

Retail items generally necessary or desirable for everyday living, usually purchased at a convenient nearby location. Because these goods cost relatively little compared to income, they are often purchased without comparison shopping.

Conveyance Tax

A tax imposed on the sale, lease, or transfer of real property.

Cordon Count

A measurement of all travel (usually vehicle trips, but sometimes person trips) in and out of a defined area (around which a "cordon" is drawn).

County

County with a capital "C" generally refers to the government or administration of a county. County with a lower case "c" may mean any county or may refer to the geographical area of a county (*e.g.*, the county road system).

Covenants, Conditions, and Restrictions (CC&Rs)

A term used to describe restrictive limitations that may be placed on property and its use, and which usually are made a condition of holding title or lease.

Criterion

A standard upon which a judgment or decision may be based. (See "Standards.")

Critical Facility

Facilities housing or serving many people, which are necessary in the event of an earthquake or flood, such as hospitals, fire, police, and emergency service facilities, utility "lifeline" facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

Cul-de-sac

A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

Cumulative Impact

As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

dB

Decibel; a unit used to express the relative intensity of a sound as it is heard by the human ear.

dBA

The "A-weighted" scale for measuring sound in decibels; weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness though the noise is actually ten times more intense.

Dedication

The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Dedication, In lieu of

Cash payments that may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot, and referred to as in lieu fees or in lieu contributions.

Defensible space

(1) In fire-fighting and prevention, a 30-foot area of non-combustible surfaces separating urban and wildland areas. (2) In urban areas, open spaces, entry points, and pathways configured to provide maximum opportunities to rightful users and/or residents to defend themselves against intruders and criminal activity.

Density, Residential

The number of permanent residential dwelling units per acre of land. Densities specified in the General Plan may be expressed in units per gross acre or per net developable acre. (See "Acres, Gross," and "Developable Acres, Net.")

Density Bonus

The allocation of development rights that allow a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location. Under California law, a housing development that provides 20 percent of its units for lower income households, or 10 percent of its units for very low-income households, or 50 percent of its units for seniors, is entitled to a density bonus. (See "Development Rights, Transfer of.")

Density, Control of

A limitation on the occupancy of land. Density can be controlled through zoning in the following ways: use restrictions, minimum lot-size requirements, floor area ratios, land use-intensity ratios, setback and yard requirements, minimum house-size requirements, ratios comparing number and types of housing units to land area, limits on units per acre, and other means. Allowable density often serves as the major distinction between residential districts.

Density, Employment

A measure of the number of employed persons per specific area (for example, employees/acre).

Density Transfer

A way of retaining open space by concentrating densities–usually in compact areas adjacent to existing urbanization and utilities–while leaving unchanged historic, sensitive, or hazardous areas. In some jurisdictions, for example, developers can buy development rights of properties targeted for public open space and transfer the additional density to the base number of units permitted in the zone in which they propose to develop.

Design Review; Design Control

The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting, and signs, in accordance with a set of adopted criteria and standards. "Design Control" requires that certain specific things be done and that other things not be done. Design Control language is most often found within a zoning ordinance. "Design Review" usually refers to a system set up outside of the zoning ordinance, whereby projects are reviewed against certain standards and criteria by a specially established design review board or committee. (See "Architectural Control.")

Destination Retail

Retail businesses that generate a special purpose trip and that do not necessarily benefit from a high-volume pedestrian location.

Detachment

Withdrawal of territory from a special district or city.

Detention Basin

Dams may be classified according to the broad function they serve, such as storage, diversion, or detention. Detention dams are constructed to retard flood runoff and minimize the effect of sudden floods. Detention dams fall into two main types. In one type, the water is temporarily stored, and released through an outlet structure at a rate which will not exceed the carrying capacity of the channel downstream. Often, the basins are planted with grass and used for open space or recreation in periods of dry weather. The other type, most often called a **Retention Pond**, allows for water to be held as long as possible and may or may not allow for the controlled release of water. In some cases, the water is allowed to seep into the permeable banks or gravel strata in the foundation. This latter type is sometimes called a **Water-Spreading Dam** or **Dike** because its main purpose is to recharge the underground water supply. Detention dams are also constructed to trap sediment. These are often called **Debris Dams**.

Developable Acres, Net

The portion of a site that can be used for density calculations. Some communities calculate density based on gross acreage. Public or private road rights-of-way are not included in the net developable acreage of a site.

Developable Land

Land that is suitable as a location for structures and that can be developed free of hazards to, and without disruption of, or significant impact on, natural resource areas.

Developer

An individual who or business that prepares raw land for the construction of buildings or causes to be built physical building space for use primarily by others, and in which the preparation of the land or the creation of the building space is in itself a business and is not incidental to another business or activity.

Development

The physical extension and/or construction of urban land uses. Development activities include: subdivision of land; construction or alteration of structures, roads, utilities, and other facilities; installation of septic systems; grading; deposit of refuse, debris, or fill materials; and clearing of natural vegetative cover (with the exception of agricultural activities). Routine repair and maintenance activities are exempted.

Development Fee

(See "Impact Fee.")

Development Rights

The right to develop land by a land owner who maintains fee-simple ownership over the land or by a party other than the owner who has obtained the rights to develop. Such rights usually are expressed in terms of density allowed under existing zoning. For example, one development right may equal one unit of housing or may equal a specific number of square feet of gross floor area in one or more specified zone districts. (See "Interest, Fee" and "Interest, Less-than-fee," and "Development Rights, Transfer of [TDR].")

Development Rights, Transfer of (TDR)

Also known as "Transfer of Development Credits," a program that can relocate potential development from areas where proposed land use or environmental impacts are considered undesirable (the "donor" site) to another ("receiver") site chosen on the basis of its ability to accommodate additional units of development beyond that for which it was zoned, with minimal environmental, social, and aesthetic impacts. (See "Development Rights.")

Discourage, v.
To advise or persuade to refrain from.

Discretionary Decision
As used in CEQA, an action taken by a governmental agency that calls for the exercise of judgment in deciding whether to approve and/or how to carry out a project.

Dissolution
Elimination of a special district; the opposite of formation.

Distribution Use
(See "Warehousing Use.")

District
(1) An area of a city or county that has a unique character identifiable as different from surrounding areas because of distinctive architecture, streets, geographic features, culture, landmarks, activities, or land uses. (2) A portion of the territory of a city or county within which uniform zoning regulations and requirements apply; a zone.

Diversion
The direction of water in a stream away from its natural course (*i.e.*, as in a diversion that removes water from a stream for human use).

Diversity
Differences among otherwise similar elements that give them unique forms and qualities. *E.g.*, housing diversity can be achieved by differences in unit size, tenure, or cost.

Duet
A detached building designed for occupation as the residence of two families living independently of each other, with each family living area defined by separate fee title ownership.

Duplex
A detached building under single ownership that is designed for occupation as the residence of two families living independently of each other.

Dwelling Unit
A room or group of rooms (including sleeping, eating, cooking, and sanitation facilities, but not more than one kitchen), which constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis.

Easement
Usually the right to use property owned by another for specific purposes or to gain access to another property. For example, utility companies often have easements on the private property of individuals to be able to install and maintain utility facilities.

Easement, Conservation
A tool for acquiring open space with less than full-fee purchase, whereby a public agency buys only certain specific rights from the land owner. These may be positive rights (providing the public with the opportunity to hunt, fish, hike, or ride over the land), or they may be restrictive rights (limiting the uses to which the land owner may devote the land in the future.)

Easement, Scenic
A tool that allows a public agency to use an owner's land for scenic enhancement, such as roadside landscaping or vista preservation.

Ecology
The interrelationship of living things to one another and their environment; the study of such interrelationships.

Economic Base
Economic Base theory essentially holds that the structure of the economy is made up of two broad classes of productive effort—basic activities that produce and distribute goods and services for export to firms and individuals outside a defined localized economic area, and nonbasic activities whose goods and services are consumed at home within the boundaries of the local economic area. Viewed another way, basic activity exports goods and services and brings new dollars into the area; non-basic activity recirculates dollars within the area. This distinction holds that the reason for the growth of a particular region is its capacity to provide the means of payment for raw materials, food, and services that the region cannot produce itself and also support the nonbasic activities that are principally local in productive scope and market area. (See "Industry, Basic" and "Industry, Non-basic.")

Economic Development Commission (EDC)
An agency charged with seeking economic development projects and economic expansion at higher employment densities.

Ecosystem
An interacting system formed by a biotic community and its physical environment.

Elderly Housing
Typically one- and two-bedroom apartments or condominiums designed to meet the needs of persons 62 years of age and older or, if more than 150 units, persons 55 years of age and older, and restricted to occupancy by them. (See "Congregate Care.")

Emergency Shelter
A facility that provides immediate and short-term housing and supplemental services for the homeless. Shelters come in many sizes, but an optimum size is considered to be 20 to 40 beds. Supplemental services may include food, counseling, and access to other social programs. (See "Homeless" and "Transitional Housing.")

Eminent Domain

The right of a public entity to acquire private property for public use by condemnation, and the payment of just compensation.

Emission Standard

The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

Encourage, v.

To stimulate or foster a particular condition through direct or indirect action by the private sector or government agencies.

Endangered Species

A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes.

Energy Benefit, Net

The difference between the energy produced and the energy required for production, including the indirect energy consumed in the manufacture and delivery of components.

Enhance, v.

To improve existing conditions by increasing the quantity or quality of beneficial uses or features.

Environment

CEQA defines environment as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance."

Environmental Impact Report (EIR)

A report required of general plans by the California Environmental Quality Act and which assesses all the environmental characteristics of an area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action. (See "California Environmental Quality Act.")

Environmental Impact Statement (EIS)

Under the National Environmental Policy Act, a statement on the effect of development proposals and other major actions that significantly affect the environment.

Erosion

(1) The loosening and transportation of rock and soil debris by wind, rain, or running water. (2) The gradual wearing away of the upper layers of earth.

Exaction

A contribution or payment required as an authorized precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

Expansive Soils

Soils that swell when they absorb water and shrink as they dry.

Export-employment Use

An activity that produces and/or distributes goods and services for export to firms and individuals outside of the city (or county). (See Economic Base.)

Expressway

A divided multi-lane major arterial street for through traffic with partial control of access and with grade separations at major intersections.

Fair Market Rent

The rent, including utility allowances, determined by the United States Department of Housing and Urban Development for purposes of administering the Section 8 Existing Housing Program.

Family

(1) Two or more persons related by birth, marriage, or adoption [U.S. Bureau of the Census]. (2) An individual or a group of persons living together who constitute a bona fide single-family housekeeping unit in a dwelling unit, not including a fraternity, sorority, club, or other group of persons occupying a hotel, lodging house or institution of any kind [California].

Farmers Home Administration (FmHA)

A federal agency providing loans and grants for improvement projects and low-income housing in rural areas.

Farmland

Refers to eight classifications of land mapped by the U.S.Department of Agriculture Soil Conservation Service. The five agricultural classifications defined below -- except Grazing Land -- do not include publicly owned lands for which there is an adopted policy preventing agricultural use.

Prime Farmland

Land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops within the last three years.

Farmland of Statewide Importance

Land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops within the last three years.

Unique Farmland

Land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, that is currently used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers.

Farmland of Local Importance

Land other than Prime Farmland, Farmland of Statewide Importance, or Unique Farmland that is either currently producing crops, or that has the capability of production. This land may be important to the local economy due to its productivity.

Grazing Land

Land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock. This classification does not include land previously designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance, and heavily brushed, timbered, excessively steep, or rocky lands which restrict the access and movement of livestock.

Fast-Food Restaurant

Any retail establishment intended primarily to provide short-order food services for on-site dining and/or take-out, including self-serve restaurants (excluding cafeterias where food is consumed on the premises), drive-in restaurants, and formula restaurants required by contract or other arrangement to offer standardized menus, ingredients, and fast-food preparation.

Fault

A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Feasible

Capable of being done, executed, or managed successfully from the standpoint of the physical and/or financial abilities of the implementer(s).

Feasible, Technically

Capable of being implemented because the industrial, mechanical, or application technology exists.

Field Act

Legislation, passed after a 1933 Long Beach earthquake that collapsed a school, that established more stringent structural requirements and standards for construction of schools than for other buildings.

Finding(s)

The result(s) of an investigation and the basis upon which decisions are made. Findings are used by government agents and bodies to justify action taken by the entity.

Fire Hazard Zone

An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

Fire-resistive

Able to withstand specified temperatures for a certain period of time, such as a one-hour fire wall; not fireproof.

Fiscal Impact Analysis

A projection of the direct public costs and revenues resulting from population or employment change to the local jurisdiction(s) in which the change is taking place. Enables local governments to evaluate relative fiscal merits of general plans, specific plans, or projects.

Fiscal Impact Report (FIR)

A report projecting the public costs and revenues that will result from a proposed program or development. (See "Fiscal Impact Analysis.")

Flood, 100-Year

The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, chance of occurring in any given year.

Flood Insurance Rate Map (FIRM)

For each community, the official map on which the Federal Insurance Administration has delineated areas of special flood hazard and the risk premium zones applicable to that community.

Flood Plain

The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the flood plain subject to a one percent chance of flooding in any given year is designated as an "area of special flood hazard" by the Federal Insurance Administration.

Flood Plain Fringe

All land between the floodway and the upper elevation of the 100-year flood.

Floodway

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "base flood" without cumulatively increasing the water surface elevation more than one foot. No development is allowed in floodways.

Floor Area Ratio (FAR)

The gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net sq. ft. of land area, a Floor Area Ratio of 1.0 will allow a maximum of 10,000 gross sq. ft. of building floor area to be built. On the same site, an FAR of 1.5 would allow 15,000 sq. ft. of floor area; an FAR of 2.0 would allow 20,000 sq. ft.; and an FAR of 0.5 would allow only 5,000 sq. ft. Also commonly used in zoning, FARs typically are applied on a parcel-by-parcel basis as opposed to an average FAR for an entire land use or zoning district.

Footprint; Building Footprint

The outline of a building at all of those points where it meets the ground.

Freeway

A high-speed, high-capacity, limited-access transportation facility serving regional and county-wide travel. Such roads are free of tolls, as contrasted with "turnpikes" or other "toll roads" that are now being introduced into Southern California. Freeways generally are used for long trips between major land use generators. At Level of Service "E," they carry approximately 1,875 vehicles per lane per hour, in both directions. Major streets cross at a different grade level.

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Friction Factor

Constraint applied in a traffic model to introduce an approximation of conditions that exist on streets in a city or county. These conditions reduce the speed of traffic and the desirability of specific links in the network upon which the traffic model distributes trips. Examples are frequency of low-speed curves, frequency of driveways, narrowness of lanes, and lack of turning lanes at intersections.

Gateway

A point along a roadway entering a city or county at which a motorist gains a sense of having left the environs and of having entered the city or county.

General Plan

A compendium of city or county policies regarding its long-term development, in the form of maps and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council or Board of Supervisors. In California, the General Plan has 7 mandatory elements (Circulation, Conservation, Housing, Land Use, Noise, Open Space, Safety and Seismic Safety) and may include any number of optional elements (such as Air Quality, Economic Development, Hazardous Waste, and Parks and Recreation). The General Plan may also be called a "City Plan," "Comprehensive Plan," or "Master Plan."

Geologic Review

The analysis of geologic hazards, including all potential seismic hazards, surface ruptures, liquefaction, landsliding, mudsliding, and the potential for erosion and sedimentation.

Geological

Pertaining to rock or solid matter.

Goal

A general, overall, and ultimate purpose, aim, or end toward which the City or County will direct effort.

Granny Flat

(See "Second Unit.")

Grasslands

Land reserved for pasturing or mowing, in which grasses are the predominant vegetation.

Greenhouse Effect

A term used to describe the warming of the Earth's atmosphere due to accumulated carbon dioxide and other gases in the upper atmosphere. These gases absorb energy radiated from the Earth's surface, "trapping" it in the same manner as glass in a greenhouse traps heat.

Groundwater

Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge

The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks that provide underground storage ("aquifers").

Group Quarters

A residential living arrangement, other than the usual house, apartment, or mobile home, in which two or more unrelated persons share living quarters and cooking facilities. **Institutional** group quarters include nursing homes, orphanages, and prisons. **Non-institutional** group quarters include dormitories, shelters, and large boardinghouses.

Growth Management

The use by a community of a wide range of techniques in combination to determine the amount, type, and rate of development desired by the community and to channel that growth into designated areas. Growth management policies can be implemented through growth rates, zoning, capital improvement programs, public facilities ordinances, urban limit lines, standards for levels of service, and other programs. (See "Congestion Management Plan.")

Guidelines

General statements of policy direction around which specific details may be later established.

Guideway

A roadway system that guides the vehicles using it as well as supporting them. The "monorail" is one such system. The most familiar and still most used guideway is the railroad. Most guideway transit systems make use of wayside electrical power for propulsion.

Habitat

The physical location or type of environment in which an organism or biological population lives or occurs.

Handicapped

A person determined to have a physical impairment or mental disorder expected to be of long or indefinite duration. Many such impairments or disorders are of such a nature that a person's ability to live independently can be improved by appropriate housing conditions.

Hazardous Material

Any substance that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

High-Occupancy Structure

All pre-1935 buildings with over 25 occupants, and all pre-1976 buildings with more than 100 occupants.

High Occupancy Vehicle (HOV)

Any vehicle other than a driver-only automobile (*e.g.*, a vanpool, a bus, or two or more persons to a car).

Highway

High-speed, high-capacity, limited-access transportation facility serving regional and county-wide travel. Highways may cross at a different grade level.

Hillsides

Land that has an average percent of slope equal to or exceeding fifteen percent.

An historic building or site is one that is noteworthy for its significance in local, state, or national history or culture, its architecture or design, or its works of art, memorabilia, or artifacts.

Historic Preservation

The preservation of historically significant structures and neighborhoods until such time as, and in order to facilitate, restoration and rehabilitation of the building(s) to a former condition.

Home Occupation

A commercial activity conducted solely by the occupants of a particular dwelling unit in a manner incidental to residential occupancy.

Homeless

Persons and families who lack a fixed, regular, and adequate nighttime residence. Includes those staying in temporary or emergency shelters or who are accommodated with friends or others with the understanding that shelter is being provided as a last resort. California Housing Element law, Section 65583(c)(1) requires all cities and counties to address the housing needs of the homeless. (See "Emergency Shelter" and "Transitional Housing.")

Hotel

A facility in which guest rooms or suites are offered to the general public for lodging with or without meals and for compensation, and where no provision is made for cooking in any individual guest room or suite. (See "Motel.")

Household

All those persons--related or unrelated--who occupy a single housing unit. (See "Family.")

Householder

The head of a household.

Households, Number of

The count of all year-round housing units occupied by one or more persons. The concept of *household* is important because the formation of new households generates the demand for housing. Each new household formed creates the need for one additional housing unit or requires that one existing housing unit be shared by two households. Thus, household formation can continue to take place even without an increase in population, thereby increasing the demand for housing.

Housing and Community Development Department of the State of California (HCD)

The State agency that has principal responsibility for assessing, planning for, and assisting communities to meet the needs of low- and moderate-income households.

Housing Authority, Local (LHA)

Local housing agency established in State law, subject to local activation and operation. Originally intended to manage certain federal subsidies, but vested with broad powers to develop and manage other forms of affordable housing.

Housing Element

One of the seven State-mandated elements of a local general plan, it assesses the existing and projected housing needs of all economic segments of the community, identifies potential sites adequate to provide the amount and kind of housing needed, and contains adopted goals, policies, and implementation programs for the preservation, improvement, and development of housing. Under State law, Housing Elements must be updated every five years.

Housing and Urban Development, U.S. Department of (HUD)

A cabinet-level department of the federal government that administers housing and community development programs.

Housing Unit

The place of permanent or customary abode of a person or family. A housing unit may be a single-family dwelling, a multi-family dwelling, a condominium, a modular home, a mobile home, a cooperative, or any other residential unit considered real property under State law. A housing unit has, at least, cooking facilities, a bathroom, and a place to sleep. It also is a dwelling that cannot be moved without substantial damage or unreasonable cost. (See "Dwelling Unit," "Family," and "Household.")

Hydrocarbons

A family of compounds containing carbon and hydrogen in various combinations. They are emitted into the atmosphere from manufacturing, storage and handling, or combustion of petroleum products and through natural processes. Certain hydrocarbons interact with nitrogen oxides in the presence of intense sunlight to form photochemical air pollution.

Identity

A consistent quality that makes a city, place, area, or building unique and gives it a distinguishing character.

Image

The mental picture or impression of a city or place taken from memory and held in common by members of the community.

Impact

The effect of any direct man-made actions or indirect repercussions of man-made actions on existing physical, social, or economic conditions.

Impact Fee

A fee, also called a development fee, levied on the developer of a project by a city, county, or other public agency as compensation for otherwise-unmitigated impacts the project will produce. California Government Code Section 66000 *et seq* specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Impacted Areas

Census tracts where more than 50 percent of the dwelling units house low- and very low-income households.

Impervious Surface

Surface through which water cannot penetrate, such as roof, road, sidewalk, and paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

Implementation

Actions, procedures, programs, or techniques that carry out policies.

Improvement

The addition of one or more structures or utilities on a parcel of land.

Incineration

The burning of refuse at high temperatures to reduce the volume of waste.

Incorporation

Creation of a new city.

Incubator Space

Retail or industrial space that is affordable to new, low-margin businesses.

Industrial

The manufacture, production, and processing of consumer goods. Industrial is often divided into "heavy industrial" uses, such as construction yards, quarrying, and factories; and "light industrial" uses, such as research and development and less intensive warehousing and manufacturing.

Industrial Park; Office Park

A planned assemblage of buildings designed for "Workplace Use." (See "Workplace Use.")

Industry, Basic

The segment of economic activity that brings dollars to a region from other areas. Traditional examples are manufacturing, mining and agriculture. The products of all of these activities are exported (sold) to other regions. The money thus brought into the local economy is used to purchase locally-provided goods and services as well as items that are not available locally and that must be imported from other regions. Other, less traditional examples of basic industry are tourism, higher education, and retirement activities that also bring new money into a region.

Industry, Non-basic

The segment of economic activity that is supported by the circulation of dollars within a region. Examples are the wholesale, retail, and service functions that supply goods and services to local sources of demand such as businesses, public agencies, and households.

Infill Development

Development of vacant land (usually individual lots or left-over properties) within areas that are already largely developed.

Infrastructure

Public services and facilities, such as sewage-disposal systems, water-supply systems, other utility systems, and roads.

In Lieu Fee

(See "Dedication, In lieu of.")

Institutional Use

(1) Publicly or privately owned and operated activities that are institutional in nature, such as hospitals, museums, and schools; (2) churches and other religious organizations; and (3) other nonprofit activities of a welfare, educational, or philanthropic nature that can not be considered a residential, commercial, or industrial activity.

Inter-agency

Indicates cooperation between or among two or more discrete agencies in regard to a specific program.

Interest, Fee

Entitles a land owner to exercise complete control over use of land, subject only to government land use regulations.

Interest, Less-than-fee

The purchase of interest in land rather than outright ownership; includes the purchase of development rights via conservation, open space, or scenic easements. (See "Development Rights," "Easement, Scenic," "Lease," and "Leasehold Interest.")

Intermittent Stream

A stream that normally flows for at least thirty (30) days after the last major rain of the season and is dry a large part of the year.

Issues

Important unsettled community matters or problems that are identified in a community's general plan and dealt with by the plan's goals, objectives, policies, plan proposals, and implementation programs.

Jobs/Housing Balance; Jobs/Housing Ratio

The availability of affordable housing for employees. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute; less than 1.0 indicates a net out-commute.

Joint Powers Authority (JPA)

A legal arrangement that enables two or more units of government to share authority in order to plan and carry out a specific program or set of programs that serves both units.

Land Banking

The purchase of land by a local government for use or resale at a later date. "Banked lands" have been used for development of low- and moderate-income housing, expansion of parks, and development of industrial and commercial centers. Federal rail-banking law allows railroads to bank unused rail corridors for future rail use while allowing interim use as trails.

Landmark

(1) A building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. (2) A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

Landscaping

Planting—including trees, shrubs, and ground covers—suitably designed, selected, installed, and maintained as to enhance a site or roadway permanently.

Landslide

A general term for a falling mass of soil or rocks.

Land Use

The occupation or utilization of land or water area for any human activity or any purpose defined in the General Plan.

Land Use Classification

A system for classifying and designating the appropriate use of properties.

Land Use Element

A required element of the General Plan that uses text and maps to designate the future use or reuse of land within a given jurisdiction's planning area. The land use element serves as a guide to the structuring of zoning and subdivision controls, urban renewal and capital improvements programs, and to official decisions regarding the distribution and intensity of development and the location of public facilities and open space. (See "Mandatory Element.")

Land Use Regulation

A term encompassing the regulation of land in general and often used to mean those regulations incorporated in the General Plan, as distinct from zoning regulations (which are more specific).

L_{dn}

Day-Night Average Sound Level. The A-weighted average sound level for a given area (measured in decibels) during a 24-hour period with a 10 dB weighting applied to night-time sound levels. The Ldn is approximately numerically equal to the CNEL for most environmental settings.

Lease

A contractual agreement by which an owner of real property (the lessor) gives the right of possession to another (a lessee) for a specified period of time (term) and for a specified consideration (rent).

Leasehold Interest

(1) The interest that the lessee has in the value of the lease itself in condemnation award determination. (2) The difference between the total remaining rent under the lease and the rent the lessee would currently pay for similar space for the same time period.

L_{eq}

The energy equivalent level, defined as the average sound level on the basis of sound energy (or sound pressure squared). The L_{eq} is a "dosage" type measure and is the basis for the descriptors used in current standards, such as the 24-hour CNEL used by the State of California.

Level of Service (LOS)

(1) A scale that measures the amount of traffic a roadway may be capable of handling on a roadway or at the intersection of roadways. Levels range from A to F, with A representing the highest level of service, as follows:

Level of Service A

Indicates a relatively free flow of traffic, with little or no limitation on vehicle movement or speed.

Level of Service B

Describes a steady flow of traffic, with only slight delays in vehicle movement and speed. All queues clear in a single signal cycle.

Level of Service C

Denotes a reasonably steady, high-volume flow of traffic, with some limitations on movement and speed, and occasional backups on critical approaches.

Level of Service D

Denotes the level where traffic nears an unstable flow. Intersections still function, but short queues develop and cars may have to wait through one cycle during short peaks.

Level of Service E

Describes traffic characterized by slow movement and frequent (although momentary) stoppages. This type of congestion is considered severe, but is not uncommon at peak traffic hours, with frequent stopping, long-standing queues, and blocked intersections.

Level of Service F

Describes unsatisfactory stop-and-go traffic characterized by "traffic jams" and stoppages of long duration. Vehicles at signalized intersections usually have to wait through one or more signal changes, and "upstream" intersections may be blocked by the long queues.

(2) Some communities in California are developing standards for levels of service relating to municipal functions such as police, fire, and library service. These standards are incorporated in the General Plan or in separate "Level of Service Plans."

Life-cycle Costing

A method of evaluating a capital investment that takes into account the sum total of all costs associated with the investment over the lifetime of the project.

Light (duty) Rail Transit (LRT)

"Street cars" or "trolley cars" that typically operate entirely or substantially in mixed traffic and in non-exclusive, at-grade rights-of-way. Passengers typically board vehicles from the street level (as opposed to a platform that is level with the train) and the driver may collect fares. Vehicles are each electrically self-propelled and usually operate in one or two-car trains.

Linkage

With respect to jobs/housing balance, a program designed to offset the impact of employment on housing need within a community, whereby project approval is conditioned on the provision of housing units or the payment of an equivalent in-lieu fee. The linkage program must establish the cause-and-effect relationship between a new commercial or industrial development and the increased demand for housing.

Liquefaction

The transformation of loose water-saturated granular materials (such as sand or silt) from a solid into a liquid state. A type of ground failure that can occur during an earthquake.

Local Agency Formation Commission (LAFCo)

A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCo is empowered to approve, disapprove, or conditionally approve such proposals. The five LAFCo members generally include two county supervisors, two city council members, and one member representing the general public. Some LAFCos include two representatives of special districts.

Lot

(See "Site.")

Lot of Record

A lot that is part of a recorded subdivision or a parcel of land that has been recorded at the county recorder's office containing property tax records.

Low-income Household

A household with an annual income usually no greater than 80 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development (HUD) for the Section 8 housing program. (See "Area.")

Low-Income Housing Tax Credits

Tax reductions provided by the federal and State governments for investors in housing for low-income households.

L_{10}

A statistical descriptor indicating peak noise levels—the sound level exceeded ten percent of the time. It is a commonly used descriptor of community noise, and has been used in Federal Highway Administration standards and the standards of some cities and counties.

Maintain, v.

To keep in an existing state. (See "Preserve, v.")

Mandatory Element

A component of the General Plan mandated by State Law. California State law requires that a General Plan include elements dealing with seven subjects--circulation, conservation, housing, land use, noise, open space and safety--and specifies to various degrees the information to be incorporated in each element. (See "Land Use Element.")

Manufactured Housing

Residential structures that are constructed entirely in the factory, and that since June 15, 1976, have been regulated by the federal Manufactured Home Construction and Safety Standards Act of 1974 under the administration of the U.S. Department of Housing and Urban Development (HUD). (See "Mobile Home" and "Modular Unit.")

Marsh

Any area designated as marsh or swamp on the largest scale United States Geologic Survey topographic map most recently published. A marsh usually is an area periodically or permanently covered with shallow water, either fresh or saline.

May

That which is permissible.

Mean Sea Level

The average altitude of the sea surface for all tidal stages.

Median Strip

The dividing area, either paved or landscaped, between opposing lanes of traffic on a roadway.

Mello-Roos Bonds

Locally issued bonds that are repaid by a special tax imposed on property owners within a "community facilities" district established by a governmental entity. The bond proceeds can be used for public improvements and for a limited number of services. Named after the program's legislative authors.

Mercalli Intensity Scale

A subjective measure of the observed effects (human reactions, structural damage, geologic effects) of an earthquake. Expressed in Roman numerals from I to XII.

Merger (District)

Elimination of a special district by transferring its service responsibilities to a city government. The merging district's territory must be totally included inside the city.

Metropolitan

Of, relating to, or characteristic of a large important city.

Microclimate

The climate of a small, distinct area, such as a city street or a building's courtyard; can be favorably altered through functional landscaping, architecture, or other design features.

Mineral Resource

Land on which known deposits of commercially viable mineral or aggregate deposits exist. This designation is applied to sites determined by the State Division of Mines and Geology as being a resource of regional significance, and is intended to help maintain the quarrying operations and protect them from encroachment of incompatible land uses.

Minimize, v.

To reduce or lessen, but not necessarily to eliminate.

Mining

The act or process of extracting resources, such as coal, oil, or minerals, from the earth.

Minipark

Small neighborhood park of approximately one acre or less.

Ministerial (Administrative) Decision

An action taken by a governmental agency that follows established procedures and rules and does not call for the exercise of judgment in deciding whether to approve a project.

Mitigate, v.

To ameliorate, alleviate, or avoid to the extent reasonably feasible.

Mixed-use

Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

Mobile Home

A structure, transportable in one or more sections, built on a permanent chassis and designed for use as a single-family dwelling unit and that (1) has a minimum of 400 square feet of living space; (2) has a minimum width in excess of 102 inches; (3) is connected to all available permanent utilities; and (4) is tied down (a) to a permanent foundation on a lot either owned or leased by the homeowner or (b) is set on piers, with wheels removed and skirted, in a mobile home park. (See "Manufactured Housing" and "Modular Unit.")

Moderate-income Household

A household with an annual income between the lower income eligibility limits and 120 percent of the area median family income adjusted by household size, usually as established by the U.S. Department of Housing and Urban Development (HUD) for the Section 8 housing program. (See "Area" and "Low-income Household.")

Modular Unit

A factory-fabricated, transportable building or major component designed for use by itself or for incorporation with similar units on-site into a structure for residential, commercial, educational, or industrial use. Differs from mobile homes and manufactured housing by (in addition to lacking an integral chassis or permanent hitch to allow future movement) being subject to California housing law design standards. California standards are more restrictive than federal standards in some respects (*e.g.*, plumbing and energy conservation). Also called **Factory-built Housing** and regulated by State law of that title. (See "Mobile Home" and "Manufactured Housing.")

Motel

(1) A hotel for motorists. (2) A facility in which guest rooms or suites are offered to the general public for lodging with or without meals and for compensation, and where guest parking is provided in proximity to guest rooms. Quite often, provision is made for cooking in individual guest rooms or suites. (See "Hotel.")

Multiple Family Building

A detached building designed and used exclusively as a dwelling by three or more families occupying separate suites.

Multiplier Effect

The recirculation of money through the economy multiplies its impact on jobs and income. For example, money paid as salaries to industrial and office workers is spent on housing, food, clothes and other locally-available goods and services. This spending creates jobs in housing construction, retail stores (*e.g.*, grocery and drug stores) and professional offices. The wage paid to workers in those industries is again re-spent, creating still more jobs. Overall, one job in basic industry is estimated to create approximately one more job in non-basic industry.

Must

That which is mandatory.

National Ambient Air Quality Standards

The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

National Environmental Policy Act (NEPA)

An act passed in 1974 establishing federal legislation for national environmental policy, a council on environmental quality, and the requirements for environmental impact statements.

National Flood Insurance Program

A federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

National Historic Preservation Act

A 1966 federal law that established a National Register of Historic Places and the Advisory Council on Historic Preservation, and that authorized grants-in-aid for preserving historic properties.

National Register of Historic Places

The official list, established by the National Historic Preservation Act, of sites, districts, buildings, structures, and objects significant in the nation's history or whose artistic or architectural value is unique.

Natural State

The condition existing prior to development.

Necessary

Essential or required.

Need

A condition requiring supply or relief. The City or County may act upon findings of need within or on behalf of the community.

Neighborhood Park

City- or County-owned land intended to serve the recreation needs of people living or working within one-half mile radius of the park.

Neighborhood Unit

According to one widely-accepted concept of planning, the neighborhood unit should be the basic building block of the city. It is based on the elementary school, with other community facilities located at its center and arterial streets at its perimeter. The distance from the school to the perimeter should be a comfortable walking distance for a school-age child; there would be no through traffic uses. Limited industrial or commercial would occur on the perimeter where arterials intersect. This was the model for American suburban development after World War II.

Nitrogen Oxide(s)

A reddish brown gas that is a byproduct of combustion and ozone formation processes. Often referred to as NOX, this gas gives smog its "dirty air" appearance.

Noise

Any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. Noise, simply, is "unwanted sound."

Noise Attenuation

Reduction of the level of a noise source using a substance, material, or surface, such as earth berms and/or solid concrete walls.

Noise Contour

A line connecting points of equal noise level as measured on the same scale. Noise levels greater than the 60 Ldn contour (measured in dBA) require noise attenuation in residential development.

Noise Element

One of the seven State-mandated elements of a local general plan, it assesses noise levels of highways and freeways, local arterials, railroads, airports, local industrial plants, and other ground stationary sources, and adopts goals, policies, and implementation programs to reduce the community's exposure to noise.

Nonattainment

The condition of not achieving a desired or required level of performance. Frequently used in reference to air quality.

Nonconforming Use

A use that was valid when brought into existence, but by subsequent regulation becomes no longer conforming. "Nonconforming use" is a generic term and includes (1) nonconforming structures (by virtue of size, type of construction, location on land, or proximity to other structures), (2) nonconforming use of a conforming building, (3) nonconforming use of a nonconforming building, and (4) nonconforming use of land. Thus, any use lawfully existing on any piece of property that is inconsistent with a new or amended General Plan, and that in turn is a violation of a zoning ordinance amendment subsequently adopted in conformance with the General Plan, will be a nonconforming use. Typically, nonconforming uses are permitted to continue for a designated period of time, subject to certain restrictions.

Notice (of Hearing)

A legal document announcing the opportunity for the public to present their views to an official representative or board of a public agency concerning an official action pending before the agency.

Objective

A specific statement of desired future condition toward which the City or County will expend effort in the context of striving to achieve a broader goal. An objective should be achievable and, where possible, should be measurable and time-specific. The State Government Code (Section 65302) requires that general plans spell out the "objectives," principles, standards, and proposals of the general plan. "The addition of 100 units of affordable housing by 1995" is an example of an objective.

Office Park

(See "Industrial Park.")

Office Use

The use of land by general business offices, medical and professional offices, administrative or headquarters offices for large wholesaling or manufacturing operations, and research and development.

Official County Scenic Highway

A segment of state highway identified in the Master Plan of State Highways Eligible for Official Scenic Highway Designation and designated by the Director of the Department of Transportation (Caltrans).

Open Space Element

One of the seven State-mandated elements of a local general plan, it contains an inventory of privately and publicly owned open-space lands, and adopted goals, policies, and implementation programs for the preservation, protection, and management of open space lands.

Open Space Land

Any parcel or area of land or water that is essentially unimproved and devoted to an open space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Orchard

A group of fruit or nut trees, either small and diverse and grown for home use, or large and uniform (*i.e.*, of one variety) and cultivated for revenue. Such a collection must be planted, managed and renewed by the householder or farmer and should not be confused with a naturally occurring grove. Citrus and nut plantations are customarily called groves.

Ordinance

A law or regulation set forth and adopted by a governmental authority, usually a city or county.

Outdoor Advertising Structure

Any device used or intended to direct attention to a business, profession, commodity, service, or entertainment conducted, sold, or offered elsewhere than upon the lot where such device is located.

Outdoor Recreation Use

A privately or publicly owned or operated use providing facilities for outdoor recreation activities.

Outer Approach Zone

Airspace in which an air-traffic controller initiates radar monitoring for incoming flights approaching an airport.

Overlay

A land use designation on the Land Use Map, or a zoning designation on a zoning map, that modifies the basic underlying designation in some specific manner.

Ozone

A tri-atomic form of oxygen (O_3) created naturally in the upper atmosphere by a photochemical reaction with solar ultraviolet radiation. In the lower atmosphere, ozone is a recognized air pollutant that is not emitted directly into the environment, but is formed by complex chemical reactions between oxides of nitrogen and reactive organic compounds in the presence of sunlight, and becomes a major agent in the formation of smog.

Para-transit

Refers to transportation services and that operate vehicles, such as buses, jitneys, taxis, and vans for senior citizens, and/or mobility-impaired.

Parcel

A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Parking, Shared

A public or private parking area used jointly by two or more uses.

Parking Area, Public

An open area, excluding a street or other public way, used for the parking of automobiles and available to the public, whether for free or for compensation.

Parking Management

An evolving TDM technique designed to obtain maximum utilization from a limited number of parking spaces. Can involve pricing and preferential treatment for HOVs, non-peak period users, and short-term users. (See "High Occupancy Vehicle" and "Transportation Demand Management.")

Parking Ratio

The number of parking spaces provided per 1,000 square of floor area, *e.g.*, 2:1 or "two per thousand."

Parking Space, Compact

A parking space (usually 7.5 feet wide by 16 feet long when perpendicular to a driveway or aisle) permitted in some localities on the assumption that many modern cars are significantly smaller, and require less room, than a standard automobile. A standard parking space, when perpendicular to a driveway or aisle, is usually 8.5 feet wide by 18 feet long.

Parks

Open space lands whose primary purpose is recreation. (See "Open Space Land," "Community Park," and "Neighborhood Park.")

Parkway

An expressway or freeway designed for non-commercial traffic only; usually located within a strip of landscaped park or natural vegetation.

Parkway Strip

A piece of land located between the rear of a curb and the front of a sidewalk, usually used for planting low ground cover and/or street trees, also known as "planter strip."

Passive Solar System

A system that distributes collected heat via direct transfer from a thermal mass rather than mechanical power. Passive systems rely on building design and materials to collect and store heat and to create natural ventilation for cooling. (See "Active Solar System.")

Patio Unit

A detached single family unit, typically situated on a reduced-sized lot, that orients outdoor activity within rear or side yard patio areas for better utilization of the site for outdoor living space.

Payback Period

The number of years required to accumulate savings or profit equal to the value of a proposed investment.

Peak Hour/Peak Period

For any given roadway, a daily period during which traffic volume is highest, usually occurring in the morning and evening commute periods. Where "F" Levels of Service are encountered, the "peak hour" may stretch into a "peak period" of several hours' duration.

Performance Standards

Zoning regulations that permit uses based on a particular set of standards of operation rather than on particular type of use. Performance standards provide specific criteria limiting noise, air pollution, emissions, odors, vibration, dust, dirt, glare, heat, fire hazards, wastes, traffic impacts, and visual impact of a use.

Personal Services

Services of a personal convenience nature, as opposed to products that are sold to individual consumers, as contrasted with companies. Personal services include barber and beauty shops, shoe and luggage repair, fortune tellers, photographers, laundry and cleaning services and pick-up stations, copying, repair and fitting of clothes, and similar services.

Physical Diversity

A quality of a site, city, or region in which are found a variety of architectural styles, natural landscapes, and/or land uses.

Picnic Area, Group

Two or more picnic tables reserved for use by 10 or more persons equipped with picnic tables, barbecue stands, and may be provided with a roofed shelter.

Plan Line

A precise line that establishes future rights-of-way along any portion of an existing or proposed street or highway and that is depicted on a map showing the streets and lot line or lines and the proposed right-of-way lines, and the distance thereof from the established centerline of the street or highway, or from existing or established property lines.

Planned Community

A large-scale development whose essential features are a definable boundary; a consistent, but not necessarily uniform, character; overall control during the development process by a single development entity; private ownership of recreation amenities; and enforcement of covenants, conditions, and restrictions by a master community association.

Planned Unit Development (PUD)

A description of a proposed unified development, consisting at a minimum of a map and adopted ordinance setting forth the regulations governing, and the location and phasing of all proposed uses and improvements to be included in the development.

Planning and Research, Office of (OPR)

A governmental division of the State of California that has among its responsibilities the preparation of a set of guidelines for use by local jurisdictions in drafting General Plans.

Planning Area

The Planning Area is the land area addressed by the General Plan. For a city, the Planning Area boundary typically coincides with the Sphere of Influence that encompasses land both within the City Limits and potentially annexable land.

Planning Commission

A body, usually having five or seven members, created by a city or county in compliance with California law (Section 65100) that requires the assignment of the planning functions of the city or county to a planning department, planning commission, hearing officers, and/or the legislative body itself, as deemed appropriate by the legislative body.

Policy

A specific statement of principle or of guiding actions that implies clear commitment but is not mandatory. A general direction that a governmental agency sets to follow, in order to meet its goals and objectives before undertaking an action program. (See "Program.")

Pollutant

Any introduced gas, liquid, or solid that makes a resource unfit for its normal or usual purpose

Pollution

The presence of matter or energy whose nature, location, or quantity produces undesired environmental effects.

Pollution, Nonpoint

Sources for pollution that are less definable and usually cover broad areas of land, such as agricultural land with fertilizers that are carried from the land by runoff, or automobiles.

Pollution, Point

In reference to water quality, a discrete source from which pollution is generated before it enters receiving waters, such as a sewer outfall, a smokestack, or an industrial waste pipe.

Poverty Level

As used by the U.S. Census, families and unrelated individuals are classified as being above or below the poverty level based on a poverty index that provides a range of income cutoffs or "poverty thresholds" varying by size of family, number of children, and age of householder. The income cutoffs are updated each year to reflect the change in the Consumer Price Index.

Power Center

Open-air stores aligned in a strip with freestanding "anchor" stores. These centers may combine three or more anchors in a single center. Many power centers include movie theaters and restaurants.

Preserve, n.

An area in which beneficial uses in their present condition are protected; for example, a nature preserve or an agricultural preserve. (See "Agricultural Preserve" and Protect.")

Preserve, v.

To keep safe from destruction or decay; to maintain or keep intact. (See "Maintain.")

Principle

An assumption, fundamental rule, or doctrine that will guide general plan policies, proposals, standards, and implementation measures. The State Government Code (Section 65302) requires that general plans spell out the objectives, "principles," standards, and proposals of the general plan. "Adjacent land uses should be compatible with one another" is an example of a principle.

Professional Offices

A use providing professional or consulting services in the fields of law, medicine, architecture, design, engineering, accounting, and similar professions, but not including financial institutions or real estate or insurance offices.

Program

An action, activity, or strategy carried out in response to adopted policy to achieve a specific goal or objective. Policies and programs establish the "who," "how" and "when" for carrying out the "what" and "where" of goals and objectives.

Pro Rata

Refers to the proportionate distribution of the cost of something to something else or to some group, such as the cost of infrastructure improvements associated with new development apportioned to the users of the infrastructure on the basis of projected use.

Protect, v.

To maintain and preserve beneficial uses in their present condition as nearly as possible. (See "Enhance.")

Public and Quasi-public Facilities

Institutional, academic, governmental and community service uses, either publicly owned or operated by nonprofit organizations.

Ranchette

A single dwelling unit occupied by a non-farming household on a parcel of 2.5 to 20 acres that has been subdivided from agricultural land.

Rare or Endangered Species

A species of animal or plant listed in: Sections 670.2 or 670.5, Title 14, California Administrative Code; or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened, or endangered.

Reclamation

The reuse of resources, usually those present in solid wastes or sewage.

Recognize, v.

To officially (or by official action) identify or perceive a given situation.

Recreation, Active

A type of recreation or activity that requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts and various forms of children's play equipment.

Recreation, Passive

Type of recreation or activity that does not require the use of organized play areas.

Recycle, v.

The process of extraction and reuse of materials from waste products.

Redevelop, v.

To demolish existing buildings; or to increase the overall floor area existing on a property; or both; irrespective of whether a change occurs in land use.

Regional

Pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

Regional Housing Needs Plan

A quantification by a COG or by HCD of existing and projected housing need, by household income group, for all localities within a region.

Regional Park

A park typically 150-500 acres in size focusing on activities and natural features not included in most other types of parks and often based on a specific scenic or recreational opportunity.

Regulation

A rule or order prescribed for managing government.

Rehabilitation

The repair, preservation, and/or improvement of substandard housing.

Research and Development Use

A use engaged in study, testing, design, analysis, and experimental development of products, processes, or services.

Residential

Land designated in the City or County General Plan and zoning ordinance for buildings consisting only of dwelling units. May be improved, vacant, or unimproved. (See "Dwelling Unit.")

Residential, Multiple Family

Usually three or more dwelling units on a single site, which may be in the same or separate buildings.

Residential, Single-family

A single dwelling unit on a building site.

Resources, Non-renewable

Refers to natural resources, such as fossil fuels and natural gas, which, once used, cannot be replaced and used again.

Restore, v.

To renew, rebuild, or reconstruct to a former state.

Restrict, v.

To check, bound, or decrease the range, scope, or incidence of a particular condition.

Retention Basin

(See "Detention Basin/Detention Pond.")

Retrofit, v.

To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. Buildings have been retrofitted to use solar energy and to strengthen their ability to withstand earthquakes, for example.

Reverse Annuity Mortgages

A home financing mechanism that enables a homeowner who a senior citizen to release equity from his or her home. The senior receives periodic payments that can be put to immediate use. Loans are fixed term and are paid when the house is sold or when the term expires.

Rezoning

An amendment to the map and/or text of a zoning ordinance to effect a change in the nature, density, or intensity of uses allowed in a zoning district and/or on a designated parcel or land area.

Richter Scale

A measure of the size or energy release of an earthquake at its source. The scale is logarithmic; the wave amplitude of each number on the scale is 10 times greater than that of the previous whole number.

Rideshare

A travel mode other than driving alone, such as buses, rail transit, carpools, and vanpools.

Ridgeline

A line connecting the highest points along a ridge and separating drainage basins or small-scale drainage systems from one another.

Right-of-way

A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads, and utility lines.

Riparian Lands

Riparian lands are comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

Risk

The danger or degree of hazard or potential loss.

Runoff

That portion of rain or snow that does not percolate into the ground and is discharged into streams instead.

Safety Element

One of the seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the protection of the community from any unreasonable risks associated with seismic and geologic hazards, flooding, and wildland and urban fires. Many safety elements also incorporate a review of police needs, objectives, facilities, and services.

Sanitary Landfill

The controlled placement of refuse within a limited area, followed by compaction and covering with a suitable thickness of earth and other containment material.

Sanitary Sewer

A system of subterranean conduits that carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (that carry surface water) and septic tanks or leech fields (that hold refuse liquids and waste matter on-site). (See "Combined Sewer" and "Septic System.")

Scenic Highway Corridor

The area outside a highway right-of-way that is generally visible to persons travelling on the highway.

Scenic Highway/Scenic Route

A highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and man-made scenic resources and access or direct views to areas or scenes of exceptional beauty or historic or cultural interest. The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising. Until the mid-1980s, general plans in California were required to include a Scenic Highways element.

School District Lands

Properties owned by public school districts and used for educational, recreational, and administrative purposes.

Second Mortgage Program

The lending by a public or private agency of a portion of a required down payment to a developer or first-time homebuyer, usually with restrictions requiring that the units assisted through the program remain affordable to very low- and low-income households.

Second Unit

A Self-contained living unit, either attached to or detached from, and in addition to, the primary residential unit on a single lot. Sometimes called "Granny Flat."

Section 8 Rental Assistance Program

A federal (HUD) rent-subsidy program that is one of the main sources of federal housing assistance for low-income households. The program operates by providing "housing assistance payments" to owners, developers, and public housing agencies to make up the difference between the "Fair Market Rent" of a unit (set by HUD) and the household's contribution toward the rent, which is calculated at 30 percent of the household's adjusted gross monthly income (GMI). "Section 8" includes programs for new construction, existing housing, and substantial or moderate housing rehabilitation.

Seiche

An earthquake-generated wave in an enclosed body of water such as a lake, reservoir, or bay.

Seismic

Caused by or subject to earthquakes or earth vibrations.

Senior Housing

(See "Elderly Housing.")

Seniors

Persons age 62 and older.

Septic System

A sewage-treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absence of oxygen. Septic systems are often used for individual-home waste disposal where an urban sewer system is not available. (See "Sanitary Sewer.")

Setback

The horizontal distance between the property line and any structure.

Settlement

(1) The drop in elevation of a ground surface caused by settling or compacting. (2) The gradual downward movement of an engineered structure due to compaction. *Differential* settlement is uneven settlement, where one part of a structure settles more or at a different rate than another part.

Shall

That which is obligatory or necessary.

Shared Living

The occupancy of a dwelling unit by persons of more than one family in order to reduce housing expenses and provide social contact, mutual support, and assistance. Shared living facilities serving six or fewer persons are permitted in all residential districts by Section 1566.3 of the California Health and Safety Code.

Shoppers Goods

Another name for comparison goods.

Shopping Center

A group of commercial establishments, planned, developed, owned, or managed as a unit, with common off-street parking provided on the site.

Should

Signifies a directive to be honored if at all possible.

Sign

Any representation (written or pictorial) used to convey information, or to identify, announce, or otherwise direct attention to a business, profession, commodity, service, or entertainment, and placed on, suspended from, or in any way attached to, any structure, vehicle, or feature of the natural or manmade landscape.

Signal Preemption

A system used by emergency vehicles, public transit vehicles and/or trains to change signal phasing from red to green assigning immediate right-of-way for a specific purpose.

Significant Effect

A beneficial or detrimental impact on the environment. May include, but is not limited to, significant changes in an area's air, water, and land resources.

Siltation

(1) The accumulating deposition of eroded material. (2) The gradual filling in of streams and other bodies of water with sand, silt, and clay.

Single-Family Dwelling, Attached

A dwelling unit occupied or intended for occupancy by only one household that is structurally connected with at least one other such dwelling unit. (See "Townhouse.")

Single-Family Dwelling, Detached

A dwelling unit occupied or intended for occupancy by only one household that is structurally independent from any other such dwelling unit or structure intended for residential or other use. (See "Family.")

Single Room Occupancy (SRO)

A single room, typically 80-250 square feet, with a sink and closet, but that requires the occupant to share a communal bathroom, shower, and kitchen.

Site

A parcel of land used or intended for one use or a group of uses and having frontage on a public or an approved private street. A lot. (See "Lot.")

Slope

Land gradient described as the vertical rise divided by the horizontal run, and expressed in percent.

Soil

The unconsolidated material on the immediate surface of the earth created by natural forces that serves as natural medium for growing land plants.

Solar Access

The provision of direct sunlight to an area specified for solar energy collection when the sun's azimuth is within 45 degrees of true south.

Solar System, Active

A system using a mechanical device, such as a pump or a fan, and energy in addition to solar energy to transport a conductive medium (air or water) between a solar collector and the interior of a building for the purpose of heating or cooling.

Solar System, Passive

A system that uses direct heat transfer from thermal mass instead of mechanical power to distribute collected heat. Passive systems rely on building design and materials to collect and store heat and to create natural ventilation for cooling.

Solid Waste

Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials. Organic wastes and paper products comprise about 75 percent of typical urban solid waste.

Specific Plan

Under Article 8 of the Government Code (Section 65450 *et seq*), a legal tool for detailed design and implementation of a defined portion of the area covered by a General Plan. A specific plan may include all detailed regulations, conditions, programs, and/or proposed legislation that may be necessary or convenient for the systematic implementation of any General Plan element(s).

Speed, Average

The sum of the speeds of the cars observed divided by the number of cars observed.

Speed, Critical

The speed that is not exceeded by 85 percent of the cars observed.

Sphere of Influence

The probable ultimate physical boundaries and service area of a local agency (city or district) as determined by the Local Agency Formation Commission (LAFCo) of the County.

Standards

(1) A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. The State Government Code (Section 65302) requires that general plans spell out the objectives, principles, "standards," and proposals of the general plan. Examples of standards might include the number of acres of park land per 1,000 population that the community will attempt to acquire and improve, or the "traffic Level of Service" (LOS) that the plan hopes to attain. (2) Requirements in a zoning ordinance that govern building and development as distinguished from use restrictions—for example, site-design regulations such as lot area, height limit, frontage, landscaping, and floor area ratio.

Stock Cooperative Housing

Multiple-family ownership housing in which the occupant of a unit holds a share of stock in a corporation that owns the structure in which the unit is located.

Stormwater Runoff

Surplus surface water generated by rainfall that does not seep into the earth but flows overland to flowing or stagnant bodies of water.

Street Furniture

Those features associated with a street that are intended to enhance that street's physical character and use by pedestrians, such as benches, trash receptacles, kiosks, lights, newspaper racks.

Street Tree Plan

A comprehensive plan for all trees on public streets that sets goals for solar access, and standards for species selection, maintenance, and replacement criteria, and for planting trees in patterns that will define neighborhood character while avoiding monotony or maintenance problems.

Streets, Local

(See " Streets, Minor.")

Streets, Major

The transportation network that includes a hierarchy of freeways, arterials, and collectors to service through traffic.

Streets, Minor

Local streets not shown on the Circulation Plan, Map, or Diagram, whose primary intended purpose is to provide access to fronting properties.

Streets, Through

Streets that extend continuously between other major streets in the community.

Structure

Anything constructed or erected that requires location on the ground (excluding swimming pools, fences, and walls used as fences).

Strip Commercial

Commercial development, usually one store deep, that fronts on a major street for a distance of one city block or more. Includes individual buildings on their own lots, with or without on-site parking, and small linear shopping centers with shallow on-site parking in front of the stores.

Subdivision

The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. "Subdivision" includes a condominium project as defined in Section 1350 of the California Civil Code and a community apartment project as defined in Section 11004 of the Business and Professions Code.

Subdivision Map Act

Division 2 (Sections 66410 *et seq*) of the California Government code, this act vests in local legislative bodies the regulation and control of the design and improvement of subdivisions, including the requirement for tentative and final maps. (See "Subdivision.")

Subregional

Pertaining to a portion of a region. The Golden Triangle is a subregional task force.

Subsidence

The gradual settling or sinking of an area with little or no horizontal motion. (See "Settlement.")

Subsidize

To assist by payment of a sum of money or by the granting of terms or favors that reduce the need for monetary expenditures. Housing subsidies may take the forms of mortgage interest deductions or tax credits from federal and/or state income taxes, sale or lease at less than market value of land to be used for the construction of housing, payments to supplement a minimum affordable rent, and the like.

Substandard Housing

Residential dwellings that, because of their physical condition, do not provide safe and sanitary housing.

Substantial

Considerable in importance, value, degree, or amount.

Target Areas

Specifically designated sections of the community where loans and grants are made to bring about a specific outcome,such as the rehabilitation of housing affordable by very low-and low-income households.

Tax Credit

A dollar amount that may be subtracted from the amount of taxes owed.

Tax Increment

Additional tax revenues that result from increases in property values within are development area. State law permits the tax increment to be earmarked for redevelopment purposes but requires at least 20 percent to be used to increase and improve the community's supply of very low-and low-income housing.

Thermal Mass

Large quantities of heavy or dense material with a high heat capacity, used in solar buildings to absorb heat, which is then stored and re-radiated as needed for heating and cooling.

Topography

Configuration of a surface, including its relief and the position of natural and man-made features.

Tourism

The business of providing services for persons traveling for pleasure, tourism contributes to the vitality of the community by providing revenue to local business. Tourism can be measured through changes in the transient occupancy tax, or restaurant sales.

Townhouse; Townhome

A one-family dwelling in a row of at least three such units in which each unit has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from any other unit by one or more common and fire-resistant walls. Townhouses usually have separate utilities; however, in some condominium situations, common areas are serviced by utilities purchased by a homeowners association on behalf of all townhouse members of the association. (See "Condominium.")

Traffic Model

A mathematical representation of traffic movement within an area or region based on observed relationships between the kind and intensity of development in specific areas. Many traffic models operate on the theory that trips are produced by persons living in residential areas and are attracted by various non-residential land uses. (See "Trip.")

Transit

The conveyance of persons or goods from one place to another by means of a local, public transportation system.

Transit-dependent

Refers to persons unable to operate automobiles or other motorized vehicles, or those who do not own motorized vehicles. Transit-dependent citizens must rely on transit, para-transit, or owners of private vehicles for transportation. Transit-dependent citizens include the young, the handicapped, the elderly, the poor, and those with prior violations in motor vehicle laws.

Transit, Public

A system of regularly-scheduled buses and/or trains available to the public on a fee-per-ride basis. Also called "Mass Transit."

Transition Zone

Controlled airspace extending upward from 700 or more feet above the ground wherein procedures for aircraft approach have been designated. The transition zone lies closer to an airport than the outer approach zone and outside of the inner approach zone. (See "Approach Zone" and "Outer Approach Zone.")

Transitional Housing

Shelter provided to the homeless for an extended period, often as long as 18 months, and generally integrated with other social services and counseling programs to assist in the transition to self-sufficiency through the acquisition of a stable income and permanent housing. (See "Homeless" and "Emergency Shelter.")

Transportation Demand Management (TDM)

A strategy for reducing demand on the road system by reducing the number of vehicles using the roadways and/or increasing the number of persons per vehicle. TDM attempts to reduce the number of persons who drive alone on the roadway during the commute period and to increase the number in carpools, vanpools, buses and trains, walking, and biking. TDM can be an element of TSM (see below).

Transportation Systems Management (TSM)

A comprehensive strategy developed to address the problems caused by additional development, increasing trips, and a shortfall in transportation capacity. Transportation Systems Management focuses on more efficiently utilizing existing highway and transit systems rather than expanding them. TSM measures are characterized by their low cost and quick implementation time frame, such as computerized traffic signals, metered freeway ramps, and one-way streets.

Trees, Heritage

Trees planted by a group of citizens or by the City or County in commemoration of an event or in memory of a person figuring significantly in history.

Trees, Landmark

Trees whose size, visual impact, or association with a historically significant structure or event have led the City or County to designate them as landmarks.

Trees, Street

Trees strategically planted--usually in parkway strips, medians, or along streets--to enhance the visual quality of a street.

Trip

A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one "production end," (or origin--often from home, but not always), and one "attraction end," (destination). (See "Traffic Model.")

Trip Generation

The dynamics that account for people making trips in automobiles or by means of public transportation. Trip generation is the basis for estimating the level of use for a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system. Trip generations of households are correlated with destinations that attract household members for specific purposes.

Truck Route

A path of circulation required for all vehicles exceeding set weight or axle limits, a truck route follows major arterials through commercial or industrial areas and avoids sensitive areas.

Tsunami

A large ocean wave generated by an earthquake in or near the ocean.

Undevelopable

Specific areas where topographic, geologic, and/or surficial soil conditions indicate a significant danger to future occupants and a liability to the City or County are designated as "undevelopable" by the City or County.

Undue

Improper, or more than necessary.

Uniform Building Code (UBC)

A national, standard building code that sets forth minimum standards for construction.

Uniform Housing Code (UHC)

State housing regulations governing the condition of habitable structures with regard to health and safety standards, and which provide for the conservation and rehabilitation of housing in accordance with the Uniform Building Code (UBC).

Urban Design

The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass, and design of various urban components and combines elements of urban planning, architecture, and landscape architecture.

Urban Limit Line

A boundary, sometimes parcel-specific, located to mark the outer limit beyond which urban development will not be allowed. It has the aim of discouraging urban sprawl by containing urban development during a specified period, and its location may be modified over time.

Urban Open Space

The absence of buildings or development, usually in well-defined volumes, within an urban environment.

Urban Services

Utilities (such as water, gas, electricity, and sewer) and public services (such as police, fire, schools, parks,and recreation) provided to an urbanized or urbanizing area.

Urban Sprawl

Haphazard growth or outward extension of a city resulting from uncontrolled or poorly managed development.

Use

The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged in accordance with the City or County zoning ordinance and General Plan land use designations.

Use, Nonconforming

(See "Nonconforming Use.")

Use Permit

The discretionary and conditional review of an activity or function or operation on a site or in a building or facility.

Utility Corridors

Rights-of-way or easements for utility lines on either publicly or privately owned property. (See "Right-of-way" or "Easement.")

Vacant

Lands or buildings that are not actively used for any purpose.

Variance

A departure from any provision of the zoning requirements for a specific parcel, except use, without changing the zoning ordinance or the underlying zoning of the parcel. A variance usually is granted only upon demonstration of hardship based on the peculiarity of the property in relation to other properties in the same zone district.

Vehicle Miles Traveled (VMT)

A key measure of overall street and highway use. Reducing VMT is often a major objective in efforts to reduce vehicular congestion and achieve regional air quality goals.

Very Low-income Household

A household with an annual income usually no greater than 50 percent of the area median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development (HUD) for the Section 8 housing program. (See "Area.")

View Corridor

The line of sight—identified as to height, width, and distance—of an observer looking toward an object of significance to the community (*e.g.*, ridgeline, river, historic building, etc.); the route that directs the viewers attention.

Viewshed

The area within view from a defined observation point.

Volume-to-Capacity Ratio

A measure of the operating capacity of a roadway or intersection, in terms of the number of vehicles passing through, divided by the number of vehicles that theoretically could pass through when the roadway or intersection is operating at its designed capacity. Abbreviated as "v/c." At a v/c ratio of 1.0, the roadway or intersection is operating at capacity. If the ratio is less than 1.0, the traffic facility has additional capacity. Although ratios slightly greater than 1.0 are possible, it is more likely that the peak hour will elongate into a "peak period." (See "Peak Hour" and "Level of Service.")

Warehousing Use

A use engaged in storage, wholesale, and distribution of manufactured products, supplies, and equipment, excluding bulk storage of materials that are inflammable or explosive or that present hazards or conditions commonly recognized as offensive.

Wastewater Irrigation

The process by which wastewater that has undergone appropriate treatment is used to irrigate land.

Watercourse

Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

Watershed

The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

Waterway

(See "Watercourse.")

Wetlands

Transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. Under a "unified" methodology now used by all federal agencies, wetlands are defined as "those areas meeting certain criteria for hydrology, vegetation, and soils." Wildlife Refuge

An area maintained in a natural state for the preservation of both animal and plant life.

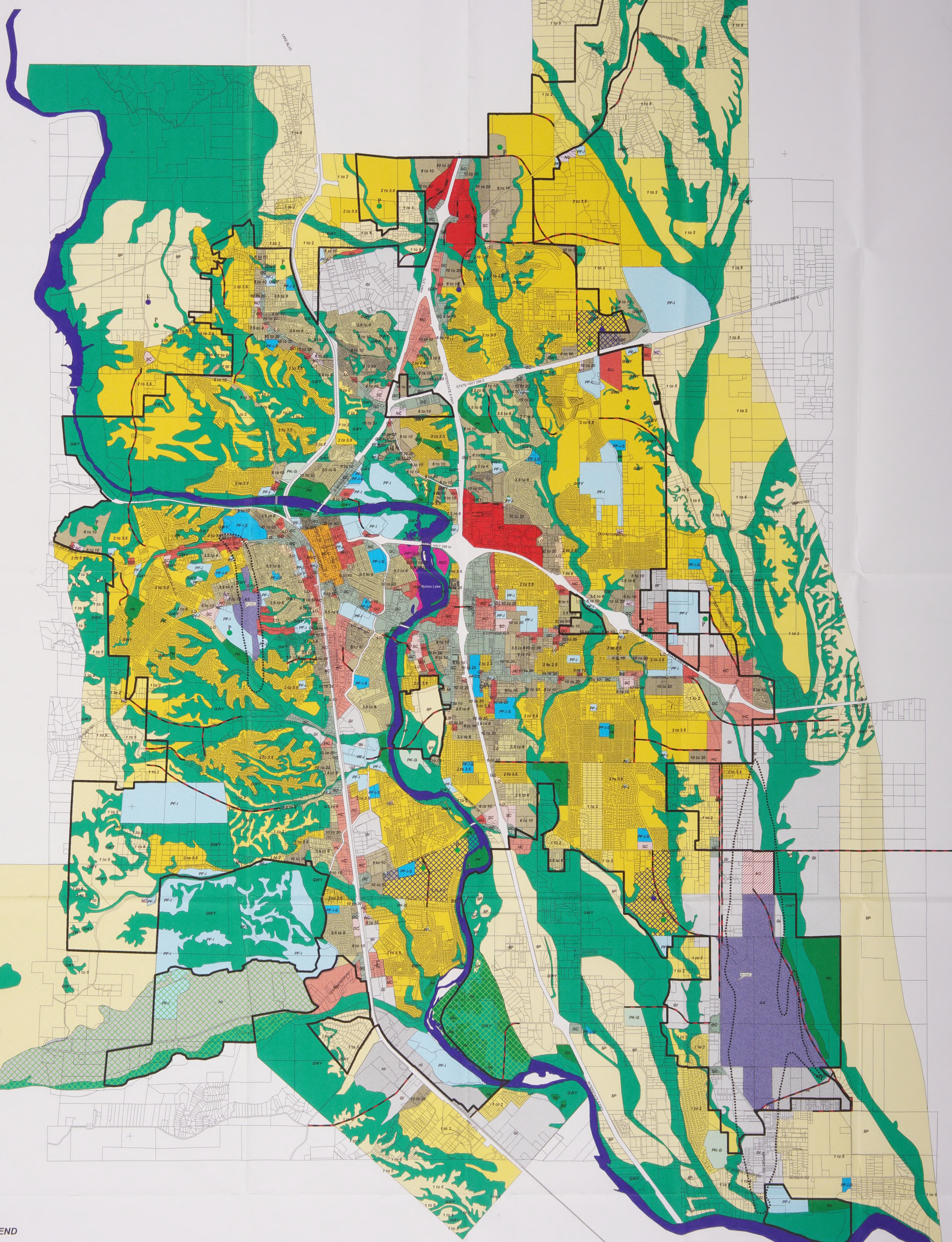
Wildlife Refuge

An area maintained in a natural state for the preservation of both animal and plant life.

Williamson Act

Known formally as the *California Land Conservation Act of 1965*, it was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its coated with destinations that attract household members for specific purposes.

City of Redding 2000 - 2020 General Plan



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